HEALTH SYSTEM INVESTMENTS TO ADDRESS SOCIAL AND ECONOMIC DETERMINANTS OF HEALTH: THE HEALTHCARE ANCHOR MODEL

by
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ABSTRACT

Background. Incentivized by payment reform, healthcare institutions are increasingly shifting focus and financial resources to addressing social determinants of health such as food security, housing availability, and economic opportunity. While there has been some assessment of these interventions either at the individual hospital level or with respect to national trends in hospital community benefit spending, the existing literature primarily focuses on health systems leveraging discretionary funding to implement one-off social determinant-related interventions (i.e. screening patients for food insecurity and then connecting them to the hospital food bank). The healthcare anchor model has emerged as a concept whereby health systems consider their roles as local economic actors that can leverage functional assets, such as hiring, purchasing, and investment dollars, to also address social determinants of health -- but in a potentially more structural way (i.e. shifting procurement practices to support local food producers that generate job opportunities for residents in disinvested communities). As growing numbers of hospitals consider adopting healthcare anchor strategies, there is a need to assess the efficacy and impact of this model, both to improve current efforts as well as shape future practice within the field.

Purpose. This study is intended to provide a robust portrait of the healthcare anchor phenomenon, including how it is defined and operationalized both within health systems as well as within communities. The aims include describing how health systems adopt and institutionalize the anchor mission internally, as well as identifying institution-level facilitators and barriers of this work as it pertains to food systems specifically. A third aim examines the extent to which health equity principles are defined and integrated into these new efforts.

Methods. The study utilizes a mixed methods design. First, a review of existing literature describing the healthcare anchor model's history and context was conducted to inform the concepts and terms that are associated with the study's research aims. Second, an annual survey was administered to 42 health systems to assess their engagement with the healthcare anchor model and the manifestation of healthcare anchor strategies inside of their institutions. Third, in-depth qualitative interviews were conducted with health system and community partner representatives to surface nuanced perspectives on the challenges and opportunities of healthcare anchor strategies, as well as to what degree these strategies incorporate health equity principles into their design and governance.

Findings. This study is among the first to examine the healthcare anchor concept in detail and seeks to place it in the context of current dialogue and evaluation of community-level health and social service interventions. Three key results emerged. First, there is considerable leadership adoption of anchor strategies within healthcare institutions, but most efforts are early stage. Second, implementation of anchor strategies is subject to polarities related to risk tolerance, scalability, and diverse culture and norms. Third, health systems and community partners are utilizing variable definitions of health equity that shape program design and execution. Despite the nascent nature of the healthcare anchor model, health systems and community partners alike point to it as a promising framework for addressing structural determinants of health such as economic and racial inequity. In addition to advancing the literature, these findings provide important practice and field-building insights that can be utilized by health systems, community partners, policymakers and funders as they seek effective strategies for ensuring a healthcare industry that is responsive to the root causes of health inequities in the United States.

Dissertation Committee Members

- Shannon Frattaroli, PhD, MPH (Advisor)
- Anne Palmer, MAIA
- Craig Pollack, MD, MHS
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15 years ago, I stepped onto the Johns Hopkins Homewood campus as an undergraduate for the first time, as an admitted student that had (admittedly) already matriculated to a university back home in Austin that felt familiar, safe. But Hopkins called out to me, and on the very last day left to say "yes", my dad and I flew to Baltimore to give it a chance. Spring Fair was in full force, and I was enchanted by the thrumming energy in the city air; the white marble and green grass of campus; the laughter that pealed from groups of students as they hustled from the library to the smoothie booth. Sometimes you just feel it in your bones. In that moment, I knew that I was coming to Hopkins. I knew it was going to change my life. I could never have anticipated just how much.

This dissertation marks the end of my third (and presumably final -- fingers crossed!) public health degree from The Johns Hopkins University. That journey would not have been possible without the plethora of extraordinary friends, professors, staff, TAs, employees, advisors, alumni, and countless others within the Hopkins community who have believed in me, challenged me, and commiserated with me. Specifically, I am deeply grateful to my dissertation committee at the Johns Hopkins Bloomberg School of Public Health – starting with Dr. Shannon Frattaroli, for patiently advising me first throughout my MPH and now in this DrPH program. The ideal advisor knows when to nudge and when to wait for a student to figure their own way through, and I am grateful to Shannon for being that champion -- as well as for being a qualitative research role model, policy expert, and kind soul to aspire to.

One of the great perks of being a Center for a Livable Future-Lerner Fellow was getting to engage with the passionate and whip-smart practitioners at the Center, including Anne Palmer. Anne's unwavering enthusiasm for food systems and equitable governance have shaped so much

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I slept and dreamt that life was joy. I awoke and saw that life was service.
I acted and behold, service was joy. –Rabindranath Tagore

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CHAPTER 1 – INTRODUCTION

1.1 Problem Statement

Health inequities in the United States are stark: life expectancy can vary up to 20 years depending on income level and zip code.[1] These inequities present not just significant public health challenges – they also tie directly to the social and economic well-being of communities and of the country as a whole.[2] The National Academy of Medicine, in their "Pathways to Health Equity" report, points out that inequitable distribution of well-being and good health "is caused by social, environment, economic, and structural factors that shape health and are themselves distributed unequally."[3] Although this understanding of the root causes of poor health has been well understood by the academic community for decades, the available evidence as well as changing political and economic forces have resulted in subsequent acknowledgement of this reality by multiple sectors engaged in the practice and promotion of health.[4] Additionally, while the data collection and analysis presented in this manuscript was performed prior to the onset of the COVID-19 pandemic within the United States, emerging data about COVID-19 death rate inequities – which predominantly impact communities already experiencing economic and racial disparities[5] – further underscores the connections between health outcomes and social and economic determinants.

The healthcare industry, representing nearly 20% of the United States' Gross Domestic Product,[6] is a significant stakeholder in the effort to address social and structural determinants of health. Health systems and hospitals have long identified patients' social needs, such as food insecurity or housing conditions, as having an impact on patient health.[7] Many faith-based health systems have historically offered or funded social services such as emergency food assistance and employment support for patients, while other healthcare institutions have supported or

funded determinant of health-related activities such as community-based food education programs and affordable housing as part of their philanthropic or community benefits strategies.[8] The passage of the Affordable Care Act in 2010 launched a shift away from traditional, volume-based healthcare delivery toward value-based care focused on actual improvements in health outcomes, incentivizing health systems to implement interventions that identify or address patient social needs.[9] Many hospitals now have programs in place to screen patients for their basic social needs, as well as connect them to community resources such as food pantries or housing vouchers that can help them address those needs.[10]

However, as health systems and their constituents engage in these efforts, they are also increasingly recognizing what has been a longstanding tenet of public health: achieving true improvements in health outcomes must include a focus on the longer-term "causes of the causes" of health inequity, in addition to short-term solutions.[11] These structural determinants of health include factors such as socioeconomic position and income.[12] One emergent phenomenon that health systems appear to be adopting is that of the "healthcare anchor model," in which health systems seek to leverage their institutional assets – including economic functions such as procurement and investment – to address structural determinants such as economic security at the community level. The Healthcare Anchor Network, the country's only network of health systems explicitly focused on defining this model and providing relevant technical assistance (described further in Section 2.4), has grown to nearly 50 health systems members since its inception in 2017[13], indicating significant recent interest amongst hospital leadership in understanding how this model can be applied within their institutions.

However, there has been very limited research into how health systems actually define and institutionalize the healthcare anchor model, how health system and community stakeholders

operationalize healthcare anchor strategies, and the connection between these strategies and health equity frameworks. This research will address these gaps by directly soliciting and analyzing insight from health systems and community organizations that actively identify as implementing healthcare anchor strategies. In addition to documenting perspectives and trends that are currently absent from the literature, this research will help define this model for the healthcare industry – providing practice recommendations for health systems looking to get started as well as those systems seeking to improve their current approach.

1.2 Aims and Research Questions

This dissertation seeks to examine the healthcare anchor model in detail, providing a robust depiction of this new trend via primary data collection from health system leadership and community stakeholders. Aim 1 is to describe the current adoption and institutionalization of a healthcare anchor mission by health systems that self-identify as healthcare anchors. Aim 2, building upon the specific findings and motivators surfacing in Aim 1, will take a closer look at anchor strategy implementation to identify key tensions, opportunities, and challenges that exist at the ground-level. Aim 3 will also build upon Aims 1 and 2, honing in on the specific tension that may exist with respect to health equity, a stated aim of deploying healthcare anchor strategies. Aim 3 will identify stakeholder perceptions about how health equity is used as a guiding principle in healthcare anchor strategy design and execution. Given the multi-sector, multi-level nature of investments in social determinants, there is utility in identifying one determinant for in-depth analysis with respect to healthcare institution action. Based on the literature and as discussed below in Chapter 2, food systems are a logical choice for several reasons. First, food is a well-understood and acknowledged component of a patient's health and

there is a preponderance of evidence linking diet, food access, and food environment to health outcomes.[14] Second, there is existing literature examining the role of hospitals in regional food ecosystems[15] – albeit not through anchor strategies specifically. Third, there has been some examination of the incorporation of health equity principles into food systems work;[16] these analyses can provide a framework for considering these principles in the context of the healthcare anchor mission as well.

The study aims and research questions are stated as follows:

Aim 1: To describe health system adoption of the healthcare anchor model and healthcare anchor strategies.

- *Research Question 1:* How do health systems institutionalize the healthcare anchor model in terms of organizational mission and leadership buy-in?
- *Research Question 2:* What types of anchor strategies are health systems engaging in?
- *Research Question 3:* What motivates health systems to adopt anchor strategies?

Aim 2: To document health system and community partner perspectives on the operational facilitators and barriers of healthcare anchor activities that focus specifically on food systems and sustainability.

- *Research Question 1*: How do health systems and community partners engaged in food systems-related anchor activities perceive facilitators and barriers to implementation?

Aim 3: To explore health system and community partner perspectives on the role of health equity as a guiding principle and aim for food systems-related anchor strategy implementation.

- *Research Question 1:* How do health systems and community partners engaged in food systems-related anchor activities define health equity in relationship to their program implementation?
- *Research Question 2:* What considerations do health systems and community partners raise with respect to incorporating health equity as a guiding principle in anchor strategy identification, design, implementation, and evaluation?

1.3 Research Design

The research aims are were accomplished in three sequential phases:

1.3.1 Phase I: Document Review

The first phase included an analysis of the healthcare anchor literature. Peer-reviewed journal articles on this topic are limited, therefore the document review draws heavily from the gray literature and includes landscape scans and reports published by the Robert Wood Johnson Foundation, the Healthcare Anchor Network, and others. This review enabled the identification of key definitions, themes, and question categories related to the healthcare anchor model that shaped the subsequent two research phases.

1.3.2 Phase II: Survey of Healthcare Anchor Institutions

The second phase of research involved an electronic survey based on the findings from the Phase I document analysis with a network of institutions that have self-identified as healthcare anchor institutions. The survey explored how health systems institutionalize anchor work and examines elements such as the level of staff buy-in that exists within the institution, the types and frequencies of anchor strategies that health systems are engaging in, and their stated reasons for adopting a healthcare anchor mission.

1.3.3. Phase III: Qualitative Interviews of Health System and Community Representatives

The third phase consisted of semi-structured interviews with health system and community representatives to capture additional detail about anchor strategy implementation. The interviews built upon findings from Phases I and II and explored (1) facilitating and hindering factors identified by anchor partners; and (2) the role of health equity in anchor strategy launch and operations. The findings from this phase identified key opportunities and challenges for organizations seeking to begin or deepen their healthcare anchor practices.

1.4 Significance

By prioritizing economic inclusion in investment and purchasing decisions, healthcare institutions can be deliberate about these investments and influence key determinants of health including employment, income, and food systems.[17] However, there is a dearth of peer-reviewed literature about the actual structure and effectiveness of healthcare anchor activities. While there have been case studies and reports that outline health system activities that fall under this designation,[18] there has been no comprehensive study to date of the institutional indicators of and motivators for adopting the anchor model, the organizational characteristics of the institutions that have adopted it, or the extent to which anchor activities center health equity in process and outcomes. As increasing numbers of health systems turn to the anchor approach and incorporate it into their organizational strategies,[19] there is a need for empirical methods to understand, assess and inform this approach.

This dissertation significantly contributes to the literature by providing additional insight into the institutionalization of anchor strategies within healthcare institutions, as well as the

operationalization of these strategies in partnership with community-based organizations. In-depth insights from both healthcare and community stakeholders will enable further definition of this model within the healthcare industry and can also directly contribute to improvements in practice as well as setting benchmarks for effective implementation and outcomes. Outlining the elements of this model may prove a useful tool for health systems as they consider their role in addressing poor health outcomes and the "causes of the causes" of health inequities. Finally, other stakeholders such as community practitioners, policymakers, and funders will be able to utilize the practice insights emerging from this study.

1.5 Dissertation Structure

This dissertation is organized in seven chapters, including this introductory chapter. Chapter 2 provides a literature review and overview of the academic theory that informed this work, including an overarching conceptual framework for the research. Chapter 3 describes the study methods, including detailed information regarding how these methods were executed, a discussion of the strengths and limitations, and human subjects considerations. Chapter 4 presents the first manuscript, *Assessing Health System Adoption of Anchor Strategies*, which focuses on Aim 1. Chapter 5 presents the second manuscript, *Analysis of Blocking and Facilitating Factors in Implementing Healthcare Anchor Strategies to Address Food Systems Inequities*, which addresses Aim 2. Chapter 6 focuses on the third research aim with the third manuscript, *Defining Health Equity as a Component of Healthcare Anchor Strategies to Address Food Systems Inequities.* Chapter 7 integrates findings from across all three manuscripts, provides concluding reflections, and identifies recommendations for future research and practice.

CHAPTER 2 – BACKGROUND

As healthcare institutions work to increase the impact of the healthcare system on the health and well-being of their patients, the recognition that 90% of what drives health outcomes takes place outside the clinic walls has become increasingly influential.[20] As a result, and further incentivized by healthcare payment reforms that emphasize value over volume, hospitals are looking upstream to address the social, economic, and environmental factors that result in poor health outcomes, reduced life expectancy, and higher healthcare costs.[21]

One key framework that has emerged as hospitals pursue these goals is the "healthcare anchor model." Alongside universities, local governments and other public and nonprofit actors unlikely to leave the neighborhoods they serve, hospitals are anchor institutions with significant resources. When directed strategically, these institutions have the potential to use their resources to initiate, accelerate, and sustain efforts that address community-level determinants of health – and in turn impact health outcomes.[22] The healthcare anchor model posits that a hospital or health system can leverage its role as an economic engine and community partner in the neighborhoods where it is located to affect key social determinants of health.[23] For example, by prioritizing economic inclusion when making hiring and procurement decisions, healthcare institutions can be deliberate about these decisions, as well as how they influence key determinants of health including employment, income, and food systems.[24]

The research proposed here will provide insights into the operations of healthcare anchor activities at both the institution and industry-level, including: (1) examination of health systems that identify as anchor institutions and the internal infrastructure and support they have built to operationalize anchor work; (2) identification of organizational characteristics that facilitate or hinder health systems' ability to successfully execute anchor strategies; and (3) health system

and community partner reflections on the intersection of anchor goals and health equity principles.

2.1 Research Gap

The Affordable Care Act (ACA) incentivized hospitals to focus on the social determinants of health – for example, through mandated community health needs assessments and improvement plans. However, there is a critical gap in our knowledge and in the literature about the size and impact of these hospitals' actions, as well as the practice implications that might arise from a deeper examination of how anchor strategies are currently implemented.[25]

There is limited research addressing the impact of hospitals in the anchor role within the United States. Most assessment of this topic has focused on the role of universities as anchor institutions, a concept that emerged in the literature starting in the mid-1990s.[26] And while there has been considerable research into the establishment of partnerships between hospitals and community stakeholders,[27] little of this research focuses specifically on the anchor approach: that is, health systems leveraging their operational assets (hiring, investment, procurement) with the purpose of strengthening local social and economic conditions. The research proposed here will address three major gaps in the existing literature concerning healthcare investments in public health and social service interventions.

The first gap relates to the specific healthcare anchor approach. Currently, the literature on hospital-community interactions encompasses a broad spectrum in terms of overall purpose, underlying values, funding streams and other characteristics.[28] The healthcare anchor model, however, is defined as a comprehensive approach to leveraging a hospital's operational assets. The emphasis on operational assets distinguishes the anchor model from other efforts. Initiatives

solely supported through discretionary funding streams such as hospital community benefit or philanthropy, for example, do not fall under the anchor designation. This is significant because many hospital-community partnerships are viewed as fungible;[29] the healthcare anchor model underscores the need for healthcare institutions to markedly transfer dollars currently assigned to traditional healthcare operations into community-facing services and programs – thus incorporating community commitment into internal organizational infrastructure.

The second gap is in understanding the organizational factors that either accelerate or hinder successful interactions between healthcare institutions and community-based partners. Little of the research on healthcare anchors to date has examined on-the-ground reality, and even less has done so through consultation with community stakeholders, who are the significant other side of the equation in anchor initiatives. This study, for reasons outlined below, will examine this question in the context of anchor interventions to build robust and equitable food systems. The existing literature on food systems initiatives, in addition to lacking the healthcare anchor lens, provides limited insight into the motivations and characteristics of anchor institutions.

The third gap pertains to the role of health equity approaches within the healthcare anchor model. Here, health equity is defined as "achievement of social justice in health, measured by elimination of health disparities."[30] If the healthcare anchor model's stated goal is to address health and economic inequities in communities, assessing whether anchor approaches are adopting equitable processes is paramount. Literature examining the incorporation of health equity into partnerships between hospitals and communities is also limited.

This analysis will serve to broaden the field of anchor institution analysis as well as deepen understanding of the specific pathways that health systems can play in social services financing and service delivery. By addressing the need to assess and define healthcare anchor actions at the

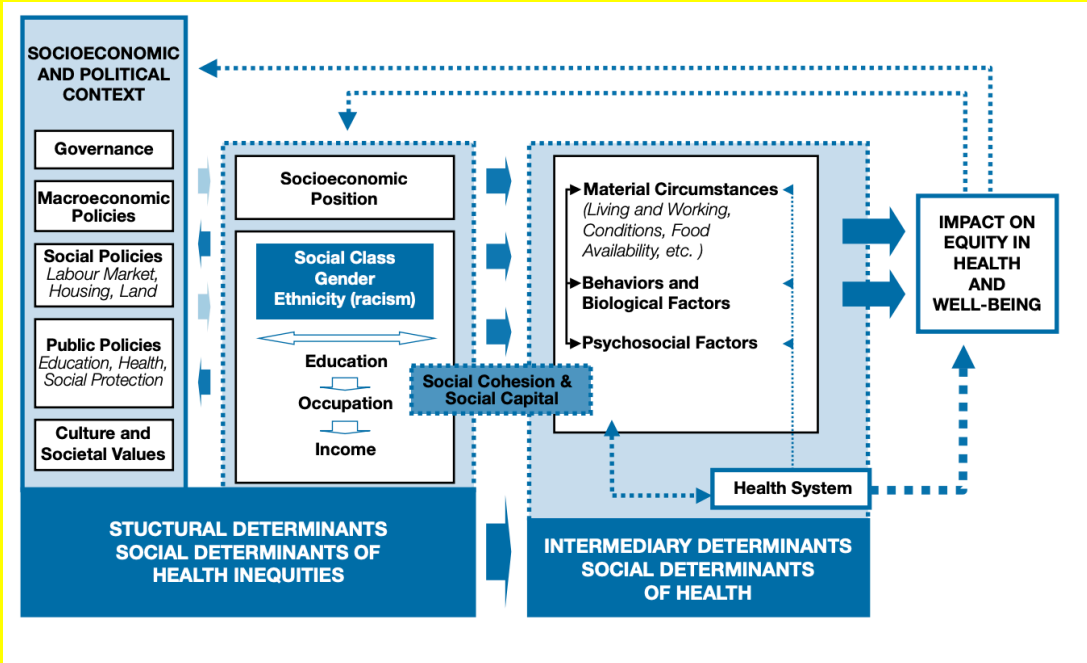
institution and network-levels, the proposed study will contribute to the field by examining whether and how leveraging hospital assets to implement place-based, community-level, social service strategies impacts select structural determinants of health. These questions in the context of anchor institutions and strategies are new. There has been limited analysis of healthcare anchor mission practices, how they are changing over time, and what effects they are having on the public's health more broadly. The Healthcare Anchor Network, the country's only network of health systems explicitly focused on this model and described further in section 2.4, provides a novel opportunity to assess and define this work, as well as to contextualize it against other ongoing population health and social determinants of health initiatives that are being adopted across the healthcare industry. This study will also help inform health systems' own internal effectiveness – with practice implications for hospitals that currently identify as engaging in healthcare anchor strategies, as well as their peers who are considering doing so.

LITERATURE REVIEW

2.2 Social, Economic, and Political Determinants of Health

There is significant literature on the importance of social determinants of health (SDOH) [31] – defined by the World Health Organization (WHO) as "the conditions in which people are born, grow, live, work and age… shaped by the distribution of money, power, and resources at global, national and local levels."[32] SDOH can be understood on several levels. The World Health Organization's conceptual framework (Figure 1) outlines the many social factors that ultimately impact health equity and well-being.

Figure 1: WHO Social Determinants of Health Conceptual Framework



Assessment of and dialogue about SDOH is often dominated by focus on a specific category of the intermediary determinants of health -- individual behaviors and biological factors, which include nutrition, physical activity, and tobacco consumption, amongst others. Michael Marmot, the former Chair of the WHO's Commission on Social Determinants of Health, states that the existing literature is characteristic of "lifestyle drift and overconcentration on healthcare. Lifestyle drift describes the tendency in public health to focus on individual behaviors, such as smoking, diet… that are undoubted causes of health inequities, but ignore the drivers of these behaviors – the causes of the causes."[33] Particularly in the United States, an over-focus on individual health behaviors ignores the fact that other intermediary determinants such as material conditions – defined by WHO as the individual financial means to buy healthy food, or access high-quality housing – have as much, or even more impact on health as the

medical care system.[34] These factors function as the aforementioned "causes of the causes" – for example, an individual's nutrition is reliant on the food system around them; physical activity may be limited by a deteriorating or unsafe physical environment.[35]

Given this reality, upstream social service interventions – improvements to affordable housing; investments in local food systems; the availability of viable employment opportunities – are essential to improving health as well as lowering healthcare costs. In *The American Healthcare Paradox,* Betsy Bradley and Lauren Taylor conducted a meta-analysis of existing literature surrounding these types of interventions, finding that "100% of the studies evaluating income support programs, 88% of the care coordination and community outreach interventions, 83% of the housing support programs, and 64% of the nutritional support programs evaluated had statistically significant, positive effects on health outcomes alone or on both health outcomes and health care spending."[36] A case study in Hennepin County demonstrated that investments in housing and connections to social service supports both improved patient quality of life outcomes while also reducing emergency department visits by 9% among Medicaid patients. This finding has incentivized Hennepin Health, the local Medicaid managed-care organization, to reinvest healthcare cost savings into local social service programs focused on housing and food.[37]

Given the tendency to define social determinants through the lens of medical care and individual behaviors, the majority of U.S.-based literature assessing the intersection of social determinants and healthcare is focused on specific interventions: for example, studying whether screening patients for food insecurity and then referring them to a food bank leads to improved health metrics such as emergency room readmissions. While this research is essential to change institutional behavior within the health system as well as ensure evidence-based standards for

such interventions, it centers a clinical lens within what is fundamentally a social issue – why is this patient food insecure in the first place? What are the economic conditions that have created that situation, both for the patient as well as the community where they live? What policies and historical legacies have resulted in food insecurity as an expected life standard for many communities across the country? And while a referral to a food bank may provide a useful short-term fix for the patient, there are also longer-term implications to consider in determining future food security and the improved health outcomes that would come with it. Goldberg et al. summarize this conceptual gap: "Though the reasons for such difficulties [facing those committed to action on the social determinants of health in the U.S.] are myriad, two principal themes jump out. First, there is a marked tendency in the U.S. to conflate health with health care. Second, the U.S. has a highly individualist political culture. This pervasive individualism impedes understanding of a number of themes arising from the relevant social epidemiologic evidence."[38]

This literature gap speaks to the need to assess interventions that are focused on changing the community-level, environmental conditions that impact patients' socioeconomic realities. As a result, studying the healthcare anchor mission, focused as it is on the local community as the unit for intervention, as well as on shifting resources out of traditional health care and into interventions that support long-term solutions (i.e. food production that also generates job opportunities), will provide an important missing perspective.

2.3 Anchor Institutions in the United States

The concept of the anchor institution in the United States arose primarily in reference to institutions such as "eds and meds" – referring to universities and hospitals – particularly those

located in American cities that experienced disinvestment in the second half of the 20th Century.[39] The term "anchor institution" was first adopted in the mid-1990s, following a series of reports and task forces by policymakers and university leaders highlighting the importance of universities reinvesting in neighboring communities. This was the case both from a mission and values perspective but also to ensure the interests of the institution itself – acknowledging, for example, that they tend to have sizeable local real estate holdings and rely on the surrounding neighborhoods for workforce supply. As a result, universities can both drive as well as benefit from community and economic development activities.[40]

A recent increased focus on applying the anchor concept to health systems appears to be driven by several forces. First, the close relationship between universities and academic medical centers has created a logical extension of the university anchor model to their healthcare counterparts. Second, community investment has historically been a priority area for many healthcare institutions, particularly those with a faith-based mission (i.e. Catholic health systems). For these institutions, investments in food, housing, financial assistance, and other social services have long been an institutional strategy and mandate.[41] These same institutions have increasingly begun adopting the anchor framework as they look to deepen their impact and provide industry leadership to their health system peers. The National Academy of Medicine's Population and Preventative Health Advisory Board identified anchor strategies as an important strategy in achieving health equity, stating that institutions should deploy "specific strategies to address the multiple determinants of health on which anchors can have a direct impact or through multi-sector collaboration; and [assess] the negative and positive impacts of anchor institutions in their communities, and [identify] how negative impacts may be mitigated."[42]

Lastly and significantly, adoption of the anchor model has been influenced by the changing nature of healthcare itself. With increased focus on social determinants of health, as well as payment reforms that hold hospitals accountable for metrics such as repeat emergency room readmissions, health systems have a new financial incentive to invest in upstream services that may prevent their patients from seeking medical services in the first place. For example, the Centers for Medicaid and Medicare Innovation launched in 2016 the Accountable Health Communities (AHC) demonstration,[43] a national pilot intended to scale social needs interventions to over 2 million Medicaid and Medicare beneficiaries in 32 awardee sites across the country.[44] However, as discussion of social determinants of health becomes more prevalent in the context of U.S. healthcare, many health systems leaders are also finding that they must tackle additional determinants of health inequity as described by the World Health Organization's conceptual framework in Figure 1. Under this framework, health systems are not only looking to address immediate concerns that might arise with their patients – i.e. finding a patient immediate food assistance or identifying transportation to the clinic, but also must develop comprehensive strategies that look farther upstream at determinants such as patients' socioeconomic position – one of the most primary drivers of health outcomes[45] – via strengthening housing, food, and jobs ecosystems. These reforms also speak to the multiple motivators that exist for health systems to engage in healthcare anchor activities – improving patient health outcomes while also potentially accruing some financial benefit to the institution. As these types of interventions become more prevalent, it is essential to apply empirical methods to examine impact as well as characteristics of effectiveness. Furthermore, it is key to translate findings from this research into actionable recommendations for hospital and community stakeholders.

2.4 The Healthcare Anchor Model and The Healthcare Anchor Network

As healthcare institutions turn to an anchor mindset, industry-wide definitions and networks have emerged to support this work. The most prominent of these is the Healthcare Anchor Network (Network), a health system-led collaboration that consists of 46 health systems (see Appendix 1 for complete list as of December 2019) across the United States that are "committed to rapidly and effectively advancing an anchor mission approach within their institutions and the communities they serve."[46] The Healthcare Anchor Network is the country's only national network exclusively focused on the healthcare anchor concept. The Network was established in May 2017, following a December 2016 convening in which its founding members, including Advocate HealthCare, Catholic Health Initiatives, Dignity Health, Henry Ford Health System, Kaiser Permanente, Promedica, Providence St. Joseph Health, Rush University Medical Center, RWJ Barnabas Health, Trinity Health, and UMass Memorial Health Care, brought together leaders representing 40 health systems to explore the potential for healthcare institutions to leverage their economic power to impact long-term well-being in communities.[47]

The Network is supported by The Democracy Collaborative, a coordinating nonprofit organization headquartered in Cleveland, Ohio and Washington, D.C. The Democracy Collaborative was originally founded at the University of Maryland in 2000 as a research center focused on strengthening democracy and civic participation, specifically by addressing the root causes of economic inequity. In 2004, the organization incorporated as a 501(c)3 and began providing advisory services to communities and sectors interested in rethinking wealth ownership. Through reports, speeches, and content generation, the organization also provided national thought-leadership on the issue.[48] One of the local initiatives supported by The Democracy Collaborative yielded the Evergreen Cooperative in Cleveland Ohio, a community-

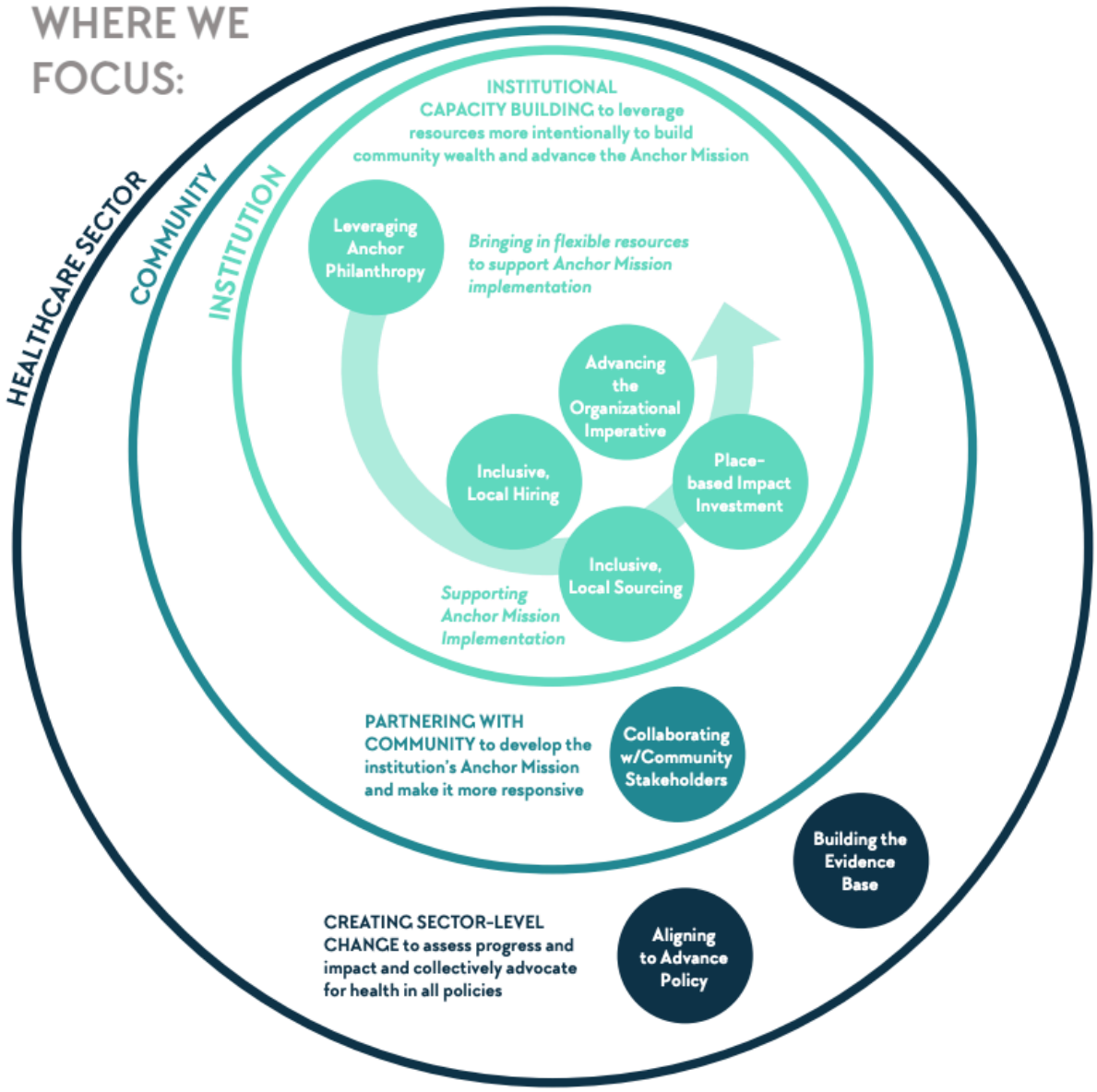
based worker cooperative developed via investment from The Cleveland Clinic and other local anchor institutions. The Evergreen Initiative is designed to utilize hospital procurement funds to create sustainability-focused "green" jobs in disinvested communities where those anchors are located – in turn providing economic opportunity at both the individual and community level.

Last year, Cleveland Clinic shifted their entire laundry operation to Evergreen Cooperative, providing an important demonstration of a health system shifting a multi-million dollar contract from a multinational corporation to a worker-owned business focused on environmentally-sustainable practices as well as local asset-building.[49] The success of Evergreen led to anchor institution engagement as a core pillar of The Democracy Collaborative's theory of change; this focus is implemented through field-specific cohorts and convenings.[50] The Healthcare Anchor Network is one of these cohorts; the organization also supports anchor networks that engage higher education institutions, city governments, and community foundations.[51]

Health system members of the Network comprise 700+ hospitals located in more than 25 states across the country (roughly 10% of total hospitals in the United States), over 1 million employees, and upwards of $50 billion in annual purchasing assets as well as $150 billion in annual investment assets.[52] The Democracy Collaborative, via 6 full-time staff dedicated to the Network, supports members in making the critical shifts needed within their health systems and as a network to design and implement solutions that advance the anchor mission. Health systems pay membership fees between $10,000 and $40,000 on a sliding scale based on total operating revenue for the organization. In return, staff provide technical assistance and convening support to members in the form of best practices-sharing, tool development, ongoing communications forums, bi-annual convenings, and joint activities such as advocacy days. Members joining the Network must identify a "lead contact" for their health system, typically a senior-level leader

with budget authority. Once membership status is established, individuals from within the health system gain access to webinars, in-person convenings, and topic-specific initiative groups that meet monthly. Those groups, depicted in the visual below (Figure 2) were identified by attendees at the kickoff convening in December 2016, and correspond to "critical shifts" that Network members have named as essential to successfully executing the healthcare anchor model.

Figure 2: Healthcare Anchor Network Initiative Group Structure



As shown above, one of the key needs identified by the Network is a compelling evidence base for anchor mission work – in order to understand the effectiveness of existing activities at the institution and network-level, as well as to facilitate further scale up of best practices throughout the industry. Members of the Network have identified a basic framework for metrics collection in order to create an understanding of the different levels of anchor mission impact, from program operations (e.g., procurement of fresh foods from a local farm) to community-level health and economic outcomes (i.e. health measures such as racial disparity in obesity rates). These measures, however, have been selected for the purpose of program implementation and assessment – not research and evaluation. The Network has not previously undergone a comprehensive organizational evaluation to assess efficacy or impact. In addition to internal need, evaluation is also a requested deliverable of the initiative's funders, which include the Kresge Foundation, the W.K. Kellogg Foundation, and the Robert Wood Johnson Foundation.

The Network has yielded several case studies: a 2019 study conducted by Koh et al outlined several examples of healthcare anchors engaging in investment, procurement, and hiring practices locally.[53] The study identifies additional areas for exploration, including understanding relationships between health systems and community members; exploring the alignment of anchor priorities with elements of marketplace competition and branding; and articulating a more comprehensive model of change or the anchor institution movement; this research will address the first two of these gaps through the research aims articulated here.

The nascent but unevaluated growth of the Network provides a compelling opportunity to address current gaps in the literature pertaining to the healthcare anchor model specifically, as well as hospital-community interactions more broadly. In particular, illuminating how health systems are supported in understanding and implementing anchor strategies such as inclusive

procurement or place-based investment, as well as identifying the institution-level barriers and facilitators that enable successful execution of those strategies, has potential to address research and practice gaps across the healthcare industry, particularly as they relate to upstream interventions. As healthcare institutions increasingly interface with community actors to address root causes of health inequities – a byproduct of health reform and other industry forces discussed in further detail via the literature review below — it is important to understand the specific traits and impacts of the healthcare anchor model. The research herein uses data collected through the Network to provide initial insights on these questions, as well as inform recommendations to drive practice across the industry. Furthermore, it is amongst the first to provide a robust, aggregated quantitative and qualitative view of both health system and community perspectives on the healthcare anchor model.

2.5 Food as A Social and Economic Determinant of Health

In examining the role of healthcare institutions in addressing upstream determinants of health, the existing literature identifies food security and food systems as a key priority.[54] There are several potential reasons for this. First, food systems span multiple intermediary determinants as well as structural determinants as defined by the WHO framework in Figure 2: the through-line from food production factors (i.e. food vendors who hire locally) to food environment (availability of healthy/fresh food) to more clinically-relevant factors such as diet and disease prevalence is likely clearer than with other types of determinants.

Second, addressing food insecurity via healthcare institution activities has historical precedence: many health systems have long maintained food pantries or developed connections to local food banks in order to supply their patient population with emergency items.[55] Today,

hospital programs that screen patients for food insecurity and link them to local resources or work to enroll eligible patients in nutrition assistance programs such as SNAP (Supplemental Nutrition Assistance Program) or WIC (Woman, Infants, and Children) also exist.[56]

Third, health systems are additionally engaged in food systems beyond the individual patient level: hospitals are significant purchasers of food and have been involved in movements to procure locally, promote environmentally sustainable supply chains, and secure healthy food for patient meals. Recognizing these various points of intervention, the American Hospital Association published its guide, "Reducing Food Insecurity and the Role of Hospitals," in 2017, outlining food system investments such as food advocacy and investments in the emergency food system. Healthcare Without Harm, a nonprofit organization focused on transforming the environmental practices of health systems, issued a "Healthy Food Playbook" in 2018, offering resources to guide investments in initiatives that improve community food environments.[57] These examples demonstrate the importance of assessing the anchor model specifically as it relates to hospital investments in food systems, as proposed in this study. Through procurement and investment, hospitals can impact a determinant of health at multiple levels.

2.6 Healthcare Anchor-Community Partnerships and Health Equity

Increased interest amongst health systems in community-level programming and investment raises important questions related to health equity. For example, as interventions focused on determinants of health are launched by hospitals, will they simply recreate the same power dynamics and collaboration challenges that currently exist? As shared earlier, health equity is defined for the purposes of this research as "achievement of social justice in health, measured by elimination of health disparities".[58] Braveman et al. also describe specific health

equity principles for consideration in collective impact initiatives, including that all people should be valued equally, the resources needed to be healthy should be distributed fairly, and that health equity is the value underlying a commitment to reduce and ultimately eliminate health disparities. Fawcett et al. explore this question via a San Francisco-based community health coalition, which examines barriers such as lack of shared responsibility for outcomes, lack of cooperation and collaboration, and limited understanding of what works when implementing collaborative partnerships that engage stakeholders at multiple ecologic levels.[59]

At the same time, the embedding of health equity principles within health outcome-related interventions – for example, by ensuring community collaboration and/or governance – is increasingly becoming an accepted tenet of hospital-community partnerships, both as an approach as well as an effective tactic. For example, an analysis of 12 collaborative regional health partnerships involving hospitals, public health departments, and other community stakeholders found that "the active engagement of partners in the establishment and ongoing operations of collaborative partnerships [was] essential to their sustainability and success."[60]

However, while community engagement is acknowledged as an effective strategy for activating patients typically marginalized from decision-making processes,[61] and community-based participatory research is understood as an effective bridge between science and practice,[62] discussion of patient involvement in health or social determinant-related interventions – particularly in the U.S. – is still frequently viewed through a clinical or health outcomes-specific lens.[63] For example, a program focused on teaching healthy eating behaviors to patients at risk of cardiovascular disease may engage patients in identifying what aspects of chronic disease education would be useful to them – but may not create opportunities for participants to discuss the systems and policies that created the local food environment, nor engage them in

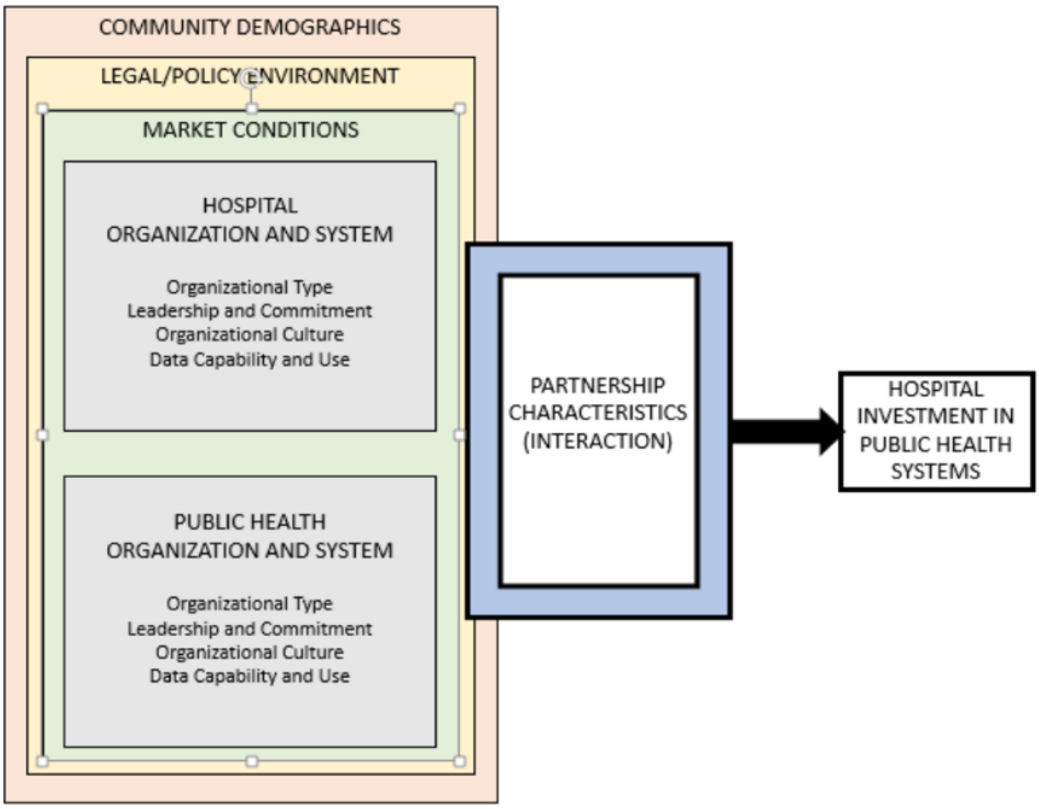
solutions development to address this history. In assessing the current landscape of healthcare anchor activities, which may include interventions such as addressing the local food ecosystem, it is important to understand the extent to which health equity and other related concepts such as collaborative governance and shared decision-making are reflected in health systems' planning and implementation associated with anchor activities.

The existing literature demonstrates that there is significant evidence exploring the role of healthcare institutions in addressing SDOH interventions. At the same time, there are gaps in understanding interventions that focus on more upstream factors such as material conditions or socioeconomic position – including food systems. There has also been limited examination of the anchor model concept as it relates to healthcare institutions, and limited application of public health network principles as well as health equity frameworks to healthcare anchor work. Further exploration of these concepts as applied to the healthcare anchor network model would add valuable insight into this growing body of work, both from a research perspective as well as with respect to practice – as health systems are implementing healthcare anchor strategies contemporaneously, there is a need for additional insights that can inform quality improvement and program implementation.

2.7 Theoretical Foundations and Conceptual Framework

This study will utilize a conceptual framework primarily based on Varda's, A Conceptual Framework for the Study of Hospital Interaction and Investment in Public Health Systems.[64]

Figure 3: Conceptual Framework for the Study of Hospital Interaction and Investment in Public Health Systems (Varda et al)



It is also informed by the previously-discussed WHO framework for understanding social and economic determinants of health, as well as the Purnell and Cooper Ecological Framework for Health Equity (see Figure 4 on next page).[65]

Figure 4: Ecological Intervention Framework for Health Equity (Purnell et al)

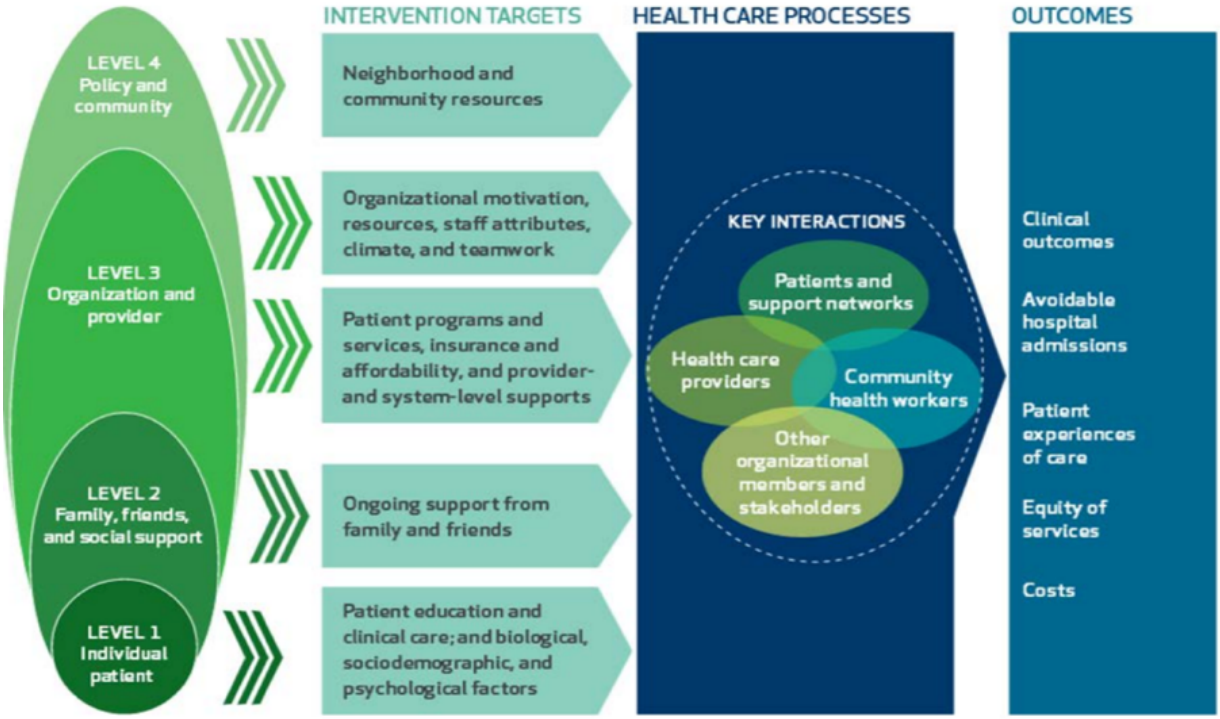
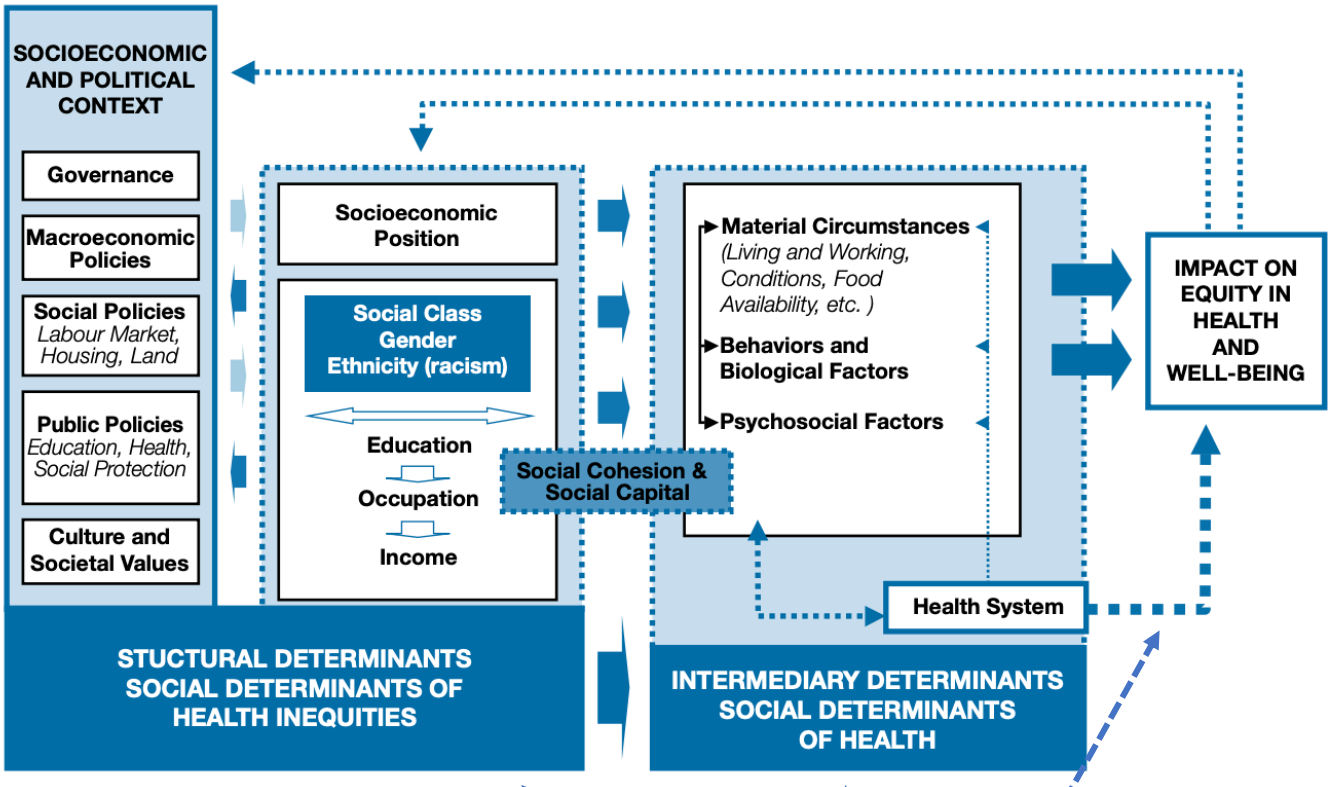
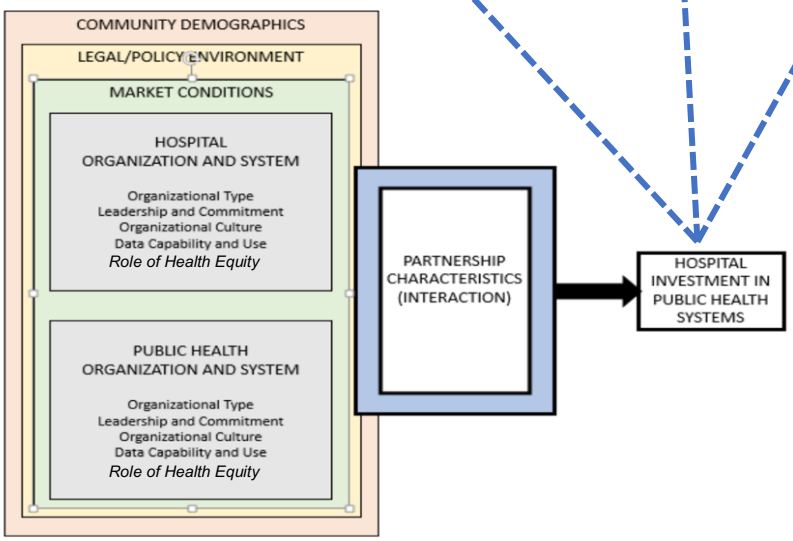


Figure 5 (next page) demonstrates the integration of the above frameworks for the purposes of this study.

Figure 5: Conceptual Framework: Role of Healthcare Anchors in Addressing Structural and Social Determinants of Health Equity



Healthcare Anchor Model



This conceptual model demonstrates that the healthcare anchor model – which consists of interactions between the hospital and the public health system – interacts with a variety of structural and social determinants of health. For example, a health system that chooses to shift its procurement practices such that it is purchasing a greater percentage of its hospital meal supplies from local food producers of color in disinvested communities is impacting several determinants, from individual-level nutrition via healthier, fresher food- to community-level employment opportunities. Beginning at the macro-level, this intervention intersects with cultural and societal values, indicating a shift from focusing solely on efficiency or cost-effectiveness to also looking at interventions that promote health and equity. At the structural determinants level, this intervention may lead to increased local employment opportunities at the food producers, in turn influencing socioeconomic position and occupation for residents in neighborhoods with significant health disparities. At the social determinants level, this change may result in healthier, more sustainable food for patients, which in turn could impact patient nutrition and health outcomes.

CHAPTER 3 – METHODS

This study design utilizes multiple data sources and quantitative as well as qualitative methods including document analysis, a survey of U.S. healthcare systems, and semi-structured interviews. The utilization of mixed methods is essential to developing a robust understanding of the healthcare anchor model phenomenon, given its relatively early maturity as a healthcare industry priority and conceptualization in the literature. These methods were sequenced intentionally to develop and then test *a priori* concepts related to the healthcare anchor model: the document review first surfaced useful definition and question categories for the survey and interviews; the survey then provided a foundational look, based on direct response from health systems themselves, into the institutionalization of healthcare anchor strategies. Finally, the interviews complemented these previous methods by incorporating both healthcare and community stakeholder perspectives on the operationalization of these strategies and the role of health equity within that. These conversations also surfaced relevant practice recommendations for the field.

The first section of this chapter outlines the sampling, data collection and data analysis procedures used in this study. Three methods were utilized across the three dissertation manuscripts and have been identified as Method 1: Document Analysis; Method 2: Health System Survey Administration; Method 3: Health System and Community Partner Interviews. Method 1 informed all three manuscripts, Method 2 was utilized for Manuscript 1, and Method 3 was utilized for Manuscripts 2 and 3. The second section of this chapter delves into additional methods theory, quality assurance, and ethics.

3.1 Method 1: Document Analysis

The literature review (Chapter 2) surfaced only a handful of articles that specifically describe the healthcare anchor phenomenon; however, given the real-time emergence of this concept within the healthcare industry, there are several gray literature contributions that either encompass case study descriptions of healthcare anchor strategies or contain more general messaging and context. As a result, the first phase of this study involved purposive selection and review of materials describing the healthcare anchor model. These contributions shed important light on several elements of the healthcare anchor model including existing terminology, institutional and industry-wide perceptions, challenges, opportunities, and more.

3.1.1 Document Selection

A significant amount of the gray literature has been generated by national organizations such as the Healthcare Anchor Network, previously discussed in Chapter 2. A purposive sample of documents was selected, with the study aims and research questions as a guiding framework. While there are guides and toolkits pertaining to the healthcare anchor model, there is not yet a widely adopted industry-issued "standard" or written set of guidelines. A multi-step planning process was followed to ensure rigor.[66] First, two methods were deployed to surface relevant texts: online search utilizing key words from the literature review and consultation with colleagues at the Healthcare Anchor Network as well as at health systems across the country. A full list of potential texts was then generated, and the texts were analyzed via an initial read-through to determine author, respondents, intended audience, style, and document purpose. Potential conflicts of interest, biases or specific perspectives were also noted at this time. Next, an organization and management scheme was developed to track and organize all of the documents by their various attributes. Document selection then took place via the following

selection criteria: 1) Does the document provide deeper contextualization of a concept embedded in one of the study research questions; (2) Does the overall sample take into account a diversity of perspectives by accounting for the document author, audience, and overall purpose? Utilizing these criteria, the following documents were selected for review:

Table 1: Texts for Document Analysis

Title	Author	Intended Audience	Document Purpose
Hospitals Building Healthier Communities: Embracing the anchor mission (2013)	The Democracy Collaborative	Health Systems	Provide historical context on the emergence of the healthcare anchor model as well as case studies, descriptions of different anchor strategies, and recommendations for advancing the field.
Improving Community Health by Strengthening Community Investment (2017)	Robert Wood Johnson Foundation	Health Systems, Foundations, Community Partners	Serve as a landscape scan of existing healthcare anchor strategies and recommend additional actions to be taken by multisector stakeholders to explore the prospect of hospitals investing in communities.
Health Institutions as Anchors in Communities: Profiles of Engaged Institutions (2006)	Annie E. Casey Foundation	Health Systems, Foundations, Community Partners	Serve as a landscape scan of existing healthcare anchor strategies and recommend additional actions to be taken by multisector stakeholders to explore the prospect of hospitals investing in communities.
Healthy Food Playbook (2017)	Healthcare Without Harm	Health Systems	Serve as a landscape scan of existing healthcare community benefit (and some healthcare anchor) strategies that intersect with community food systems; serve as a toolkit for health systems considering

			adopting practices related to food systems.
Hospitals are Economic Anchors in their Communities (2017)	American Hospital Association	Policymakers	Trade publication articulating specific value of health systems as employers; financial analysis on impact of community hospitals on U.S. economy
Anchoring Health beyond Clinical Care: UMass Memorial Health Care's Anchor Mission Project (2019)	Harvard T.H. Chan School of Public Health (Case Study)	Academia, Health Systems	Describe in detail the adoption of the healthcare anchor mission at a health system in Western Massachusetts.

3.1.2 Coding and Analysis

A coding protocol was developed based on *a priori* knowledge of the healthcare anchor model. This included assessing each of the research questions for specific concepts and translating those concepts into codes (i.e. institutional buy-in, operational barriers, healthcare anchor mission definition). The codebook containing these codes can be found in Appendix 2. Next, the codebook was applied to a full read of the texts above, utilizing MAXQDA software. In accordance with standard methodology for document analysis and coding, categories or concepts that had not been included in the codebook were noted and added as additional inductive codes. Given the use of this method as an input to Methods 2 and 3 described below rather than a stand-alone research method, the codebook was finalized without the engagement of a second coder. Upon completion of coding, memos were constructed to highlight relevant patterns in the text segments, and these memos were organized in accordance with each of the research questions. The memos were also utilized to identify themes – as well as unanswered questions – pertinent to the study aims.

3.2 Method 2: Health System Electronic Survey

One key feature of this study is data from a survey administered to a national network of self-identified healthcare anchor institutions. While the existing healthcare anchor-related literature has predominantly utilized case study descriptions to highlight pertinent themes, this survey methodology enables additional analysis of common trends and action frequencies across multiple anchor institutions.

3.2.1 Survey Design

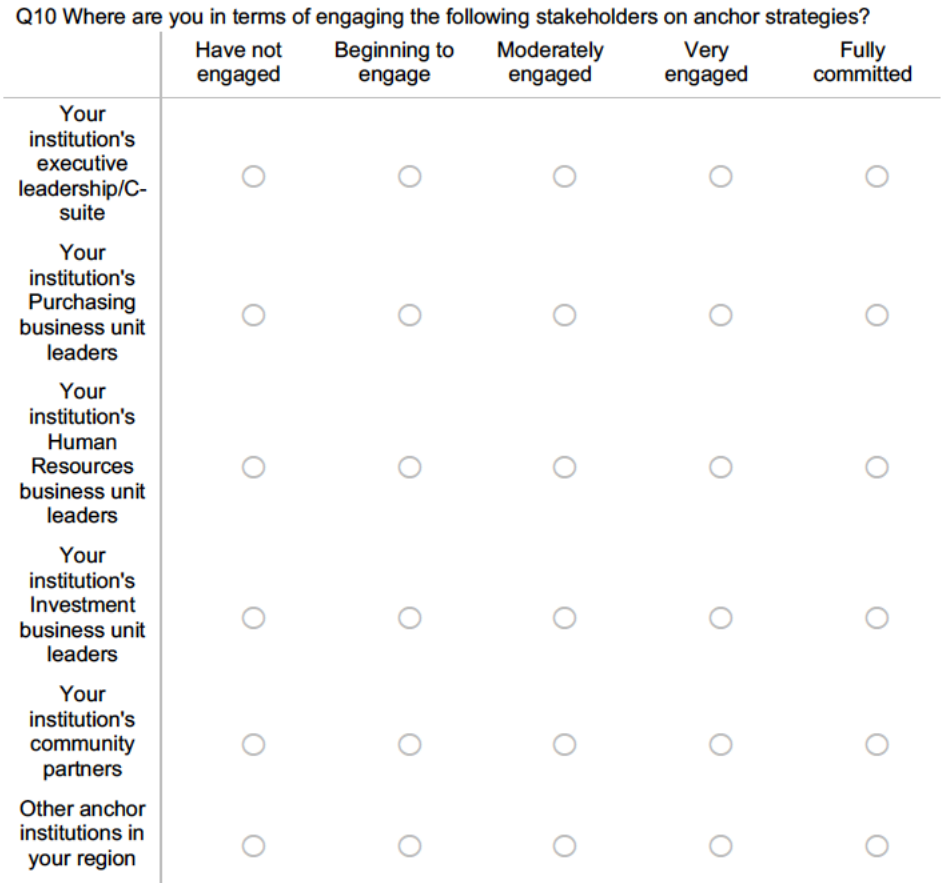
The survey was designed via an iterative process that incorporated findings from the document analysis and input from staff at the Healthcare Anchor Network as well as public health network experts at the University of Colorado at Denver Center for Network Science. Prior to survey development, a framework outlining key research concepts was developed, along with several key question domains that pertained to those research concepts. Identified domains included:

- General health system priorities
- The presence of a healthcare anchor mission
- The level of adoption of healthcare anchor mission
- Reasons for adopting the healthcare anchor mission
- Type of anchor mission strategies currently being implemented
- Level of scale for anchor strategy implementation
- Demographic information – respondent role, duration of time in the Network

Within each of these domains, specific measures were then identified. For example, to understand the level of adoption of healthcare anchor mission within a health system, the

measure of "stakeholder buy-in" was developed. To assess this measure, a survey question was formulated, as identified in Figure 6 below:

Figure 6: Sample Question from Electronic Survey



Depending on the question format, Likert scales (i.e. "strongly disagree, disagree, neither agree nor disagree, agree, strongly agree") or yes/no response options were provided. Open-ended qualitative questions were also developed to provide additional insight into health system perceptions and motivators. Where relevant, questions were based off of previously validated public health network surveys designed by the University of Colorado at Denver Center on Network Science and administered to health system stakeholders.[67]

Additionally, given the nascent nature of the healthcare anchor model, staff from The Democracy Collaborative were engaged to ensure that the survey utilized specific terminology and language that has been developed by the health system members of the Healthcare Anchor Network themselves. For example, "healthcare anchor mission" was defined as "an institution making a commitment to intentionally apply its long-term, place-based economic power and human capital in partnership with its community to mutually benefit the long-term well-being of both."[68]

Between August and September 2019, a draft survey was developed utilizing Qualtrics survey software. This draft version was pilot tested with five representatives from the Healthcare Anchor Network who were not part of the survey sample but could provide relevant insights on the flow and clarity of the survey. Pilot testers were asked to take the survey in its entirety and note any reflections they had on sequencing and wording. Feedback from pilot testers was received and incorporated into the final survey design. The survey also included an electronic consent form that respondents were asked to review and accept prior to continuing with the survey. Participants were able to access the survey from either a computer or mobile browser.

3.2.2 Recruitment and Survey Administration

As described in Chapter 1, the Healthcare Anchor Network is a network of health systems who have self-identified as healthcare anchor institutions. This set of health systems was identified as the sample for the survey and contact information for the "lead contact" at each health system – usually an executive sponsor or program manager responsible for coordinating anchor-related strategies at the system – was provided by Network staff. Two weeks prior to the survey being distributed, lead contacts were informed via a Network group email of the purpose

of the evaluation, that the survey was forthcoming, what type of time commitment it would require, and researcher contact information for follow-up questions. The survey was administered from October 4th, 2019-December 31, 2019. On October 4th, initial outreach emails with a link to the survey were emailed to each lead contact. After two weeks, a non-personalized reminder was sent to all respondents who had not yet completed the survey. After four weeks, individual email outreach was conducted to all respondents who had not yet completed the survey with an offer to respond to any questions or concerns about the survey. A subsequent personalized reminder was sent after eight weeks, and a fourth and final personalized reminder was sent between December 1st and December 20th to those participants who had not responded to the survey.

3.2.3 Data Collection and Analysis

All survey responses were captured in Qualtrics and analyzed using descriptive statistical techniques. In addition to analysis of each individual question, the responses were also assessed for sample representativeness in terms of geography, health system duration of involvement in the Healthcare Anchor Network, and health system type (i.e. nonprofit hospital, public hospital). For qualitative questions, analysis of free-text responses was conducted by completing an initial read-through and developing a preliminary thematic organization scheme. A second coder also reviewed the free-text responses and offered edits and additions to the thematic organization scheme. The scheme was then discussed, reconciled, and the primary researcher (S. Sarkar) applied the scheme to the responses to further crystallize emergent themes.

3.3 *Method 3: Health System and Community Partner Interviews*

The previous literature on healthcare anchor partnerships provides limited insights into the facilitators and barriers involved in on-the-ground implementation.[69] Furthermore, the literature has rarely delved into the perspectives of the community stakeholders with which healthcare anchors must partner in order to carry out that implementation, or the integration of health equity into design and implementation.[70] While several case studies outlining healthcare anchor strategy examples have been published, additional information is needed in order to understand directly how these institutions engage with one another, define success, and address challenges. Conducting semi-structured interviews with health systems and community partners provides unique insights on these issues and advances the field by highlighting the specific operational issues that both sets of stakeholders face.

3.3.1 Participant Selection and Recruitment

Participants were required to meet the following eligibility criteria: over 18 years of age; fluent in English; involved in the implementation of a specifically-identified healthcare anchor strategy focused on food systems. An initial discussion was held with Healthcare Anchor Network staff to identify health system members who were known to be implementing food systems-related anchor strategies and contact information for lead contacts for each of these anchor partnerships was then accessed and verified through the Network.

In total, 20 semi-structured in-depth interviews were conducted. Eighteen of the interviews were conducted in-person on-site with the specific health system or community organization representative, and 2 took place via phone due to travel caution as a result of the emerging COVID-19 pandemic. This sample size was identified based on an assessment of the research question, which necessitated interview subjects with specialized expertise.

The recruitment email for the interviews included in Appendix 5 was approved by the Johns Hopkins Institutional Review Board. Initial outreach to potential interviewees took place in November 2019 and began with emailing the recruitment script to the five identified health system lead contacts (previously described in Method 2). Three of the health system lead contacts expressed their willingness to be involved upon receiving this initial outreach. Follow-up email communications to the other two contacts were then sent in December 2019, resulting in an additional two confirmations. One additional round of follow-up email communication was conducted in early January 2020, resulting in the fifth confirmation. Thus, representatives from each of the five identified health system partnerships responded and participated in these interviews.

A first set of phone and email conversations was conducted with each of these lead contacts that focused on snowball sampling[71]: participants identified health system staff, in addition to themselves, who might be interested in participating in the study, as well as community partner contacts. These additional participants were recruited through a combination of direct outreach from the interviewer (S. Sarkar) as well as outreach from their lead contact colleague within their institution. In two of the sites, the interviewer also independently reached out to community partner contacts with whom she had previous personal relationships with and that she knew were engaged in the specifically-identified healthcare anchor strategy. Lead contacts also served in a coordinating function – as the interviewer was able to travel to four of the five anchor partnership sites, lead contacts helped to schedule interviews and ensure that she would have the opportunity to speak with identified and confirmed participants. To ensure responsiveness to the participants, the interviewer offered wide windows of availability between January and February 2020 to travel in-person to their offices or other places of work.

The resulting sample included both health system and community partner staff of varying levels (from frontline program staff to executive-level staff). Furthermore, each of the five anchor partnerships corresponded to 2 or more interview participants. This sampling approach was intentional and focused on ensuring that anchor strategies were not just being described through a singular perspective. This diversity of respondents was targeted in order to ensure a robust set of information regarding the motivators, barriers, facilitators, equity factors, and other variables related to the implementation of healthcare anchor strategies. A purposive approach to sample selection[72] was taken in order to ensure that interview respondents were best positioned to speak to the research question-related concepts and unanswered questions identified through Method 1 above. Furthermore, community partners were included in the sample to ensure that their experiences and context further refined the healthcare anchor literature, which until this time has predominantly focused on health systems' perspectives. The sample size proved relatively feasible to achieve, given the interest of participants in the topic, their willingness to dedicate time to the interview, and the promise of confidentiality.

3.3.2. Interview Protocol

All scheduled interviews took place as planned. In-person interviews were conducted at the respondent's place of employment – either a health system or a community partner office or field site. All participants were provided with either a paper or electronic copy of the consent form, given an opportunity to review it as well as ask any question, and provide either their oral consent to continue, or decline if they desired. All consenting participants were informed that their responses would remain confidential and that no identifying information would be shared.

Participants were also asked for their consent to digitally record and transcribe the interviews. The interviews ranged from 40-60 minutes.

Interviews progressed through several sections, outlined in the Healthcare Stakeholder Interview Guide and the Community Stakeholder Interview Guide in Appendices 6 and 7. The purpose of the interview guide structure was to begin with more tactical and descriptive questions that familiarized the participant with the topics at hand before progressing into more nuanced or theoretical questions. Sections of the interview guide included introductory questions, partnership details, anchor interactions, food system interactions, a series of questions related to barriers and facilitators related to the specific anchor strategy partnership, and then a series of questions related to addressing health equity via the partnership.

3.3.3 Data Analysis

Upon completing the first set of interviews related to a singular healthcare anchor partnership, interview recordings were transcribed and assessed for validity via an initial read-through of the transcript. A preliminary codebook was developed based on the existing literature, the study aims, and an initial read-through of the interview transcripts. To refine the codebook, an iterative process was undertaken as the codebook was applied to each transcript and reviewed for themes, emergent concepts, and coding consolidations or additions. To ensure rigor, a second coder who had not previously been a part of the study team was engaged to apply the framework and propose further refinements to the codebook. A final codebook was then developed and the primary researcher applied the codebook to all transcripts using MAXQDA qualitative data analysis and research software. Utilizing a content analysis approach, key themes were identified. Furthermore, illustrative quotes were used to strengthen the credibility of the study,

providing direct examples of the theme interpretation via participant's own responses. All data, including in the quotes, were de-identified to ensure the confidentiality of participants. Throughout the process of data collection and analysis, researcher insights on emerging patterns and personal bias were documented via written and voice memos.

3.4 Ethical Considerations

A research plan outlining the dissertation research was submitted to the Johns Hopkins Bloomberg School of Public Health Institutional Review Board in June 2019. The IRB deemed that the proposed activities, including the surveys and qualitative interviews, did not qualify as human subjects research as defined by DHHS regulations 45 CFR 46.102, and therefore did not require IRB oversight (see Appendix 9).

Several steps were taken to protect participant privacy and confidentiality. For the survey, participants were presented with an electronic consent form (Appendix 3) outlining in detail the aims of the research, the potential benefits and risks of participation, the voluntary nature of participation, and the option for participants to cease participation in the survey at any point if they wished. Participants were also encouraged to reach out directly with any questions or points of clarification. For the interviews, in-person participants were provided with a physical copy of the study oral consent form (Appendix 8), and phone participants were provided with an electronic copy. This form also outlined the elements described above and provided participants with the opportunity to ask questions of the researcher prior to beginning the interview. Participants could choose to end the interview at any time or ask for specific portions to remain unrecorded if they preferred. Participants were asked to verbally consent to the interviews, as well as verbally consent for the interviews to be audio recorded.

Contact information for all study participants was collected and utilized to enable outreach, recruitment, and scheduling; this information was stored in a Google Spreadsheet maintained separately from collected response data. Each survey response was assigned a randomized ID through the Qualtrics interface. Interview transcripts were also assigned a randomized number (assigned using a random number generator) and stored separately from contact information.

No individual or organizational identifiers were used in data analysis or reporting. Although the subject matter was not deemed to be highly sensitive, confidentiality was adopted in order to ensure that participants felt comfortable speaking about a relatively early-stage phenomenon. This was particularly the case for interviews with community partners, who might otherwise feel pressure to speak positively about health system partners with whom they had a dependent financial relationship.

All information pertaining to the study was stored either in a password-protected Qualtrics account (for the survey responses) or in a password-protected Google Drive folder. This information, including any audio recordings as well as memos and other identifying information, will be destroyed within one year of the submission of the manuscript presented herein.

Finally, at the time of this research the author serves as a consultant to the Healthcare Anchor Network, the organization whose member data was utilized for this research. This relationship was disclosed as a potential conflict of interest in the IRB application and several steps were taken to mitigate this conflict, outlined in the quality assurance section below.

3.5 Method Strengths and Quality Assurance

The healthcare anchor phenomenon is a relatively early-stage trend about which little has been captured or codified in the peer-reviewed literature. It also intersects with a complex set of elements including individual actors, institutions, networks, policies, and more. As a result, this research utilizes an interpretivist paradigm, rather than a positivist paradigm[73], to ensure a robust and unique set of data and insights. Accordingly, this study utilizes the qualitative research criteria identified by Lincoln and Guba[74] to ensure quality. The Criteria for Trustworthiness framework puts forth four criteria to ensure a trustworthy study: credibility, transferability, dependability, and confirmability.[75] The study design addresses all four of these criteria through the following considerations and strategies:

Credibility. In the interpretivist tradition, there are multiple realities that exist, and multiple ways for researchers to identify and access them. One tactic to strengthen credibility is the development of familiarity with the culture of the institutions and groups under study.[76] Over the past two years, the author has undertaken in-depth study of the healthcare anchor model through a variety of forums. First, as described above, the author served as a consultant to the Healthcare Anchor Network since May 2018, engaging in conversations related to healthcare anchor strategy adoption, community stakeholder collaboration, and the development of programming for in-person convenings held by the Network. Through this Network, the author has been exposed to hundreds of examples of healthcare anchor strategies and heard anecdotally about key questions and implementation facilitators/barriers from dozens of healthcare stakeholders as well as a smaller subset of community stakeholders. In addition to interactions with the Healthcare Anchor Network, the author also has a deep understanding of the role of

healthcare anchors from her professional experience as Chief Policy and Engagement Officer for the Baltimore City Health Department, where she frequently engaged with local health systems and other anchor institutions on their involvement in community economic development initiatives. Supplementing this experiential learning, the document review described in Section 3.1 was intended to inform a comprehensive, industry-wide understanding of this model, its history, and its current manifestations.

In addition to field familiarity, ongoing triangulation took place within and across methods. The research questions, and the manuscripts that correlate with them, were designed to build upon one another as well as draw from a number of data sources and perspectives – in this case, the gray literature, health system representatives, and community representatives. The processes of survey development, interview guide development, and survey and interview analysis were all subject to ongoing iteration between the author, subject matter experts at the Healthcare Anchor Network, and in some cases the study subjects themselves.

Transferability. This study is intended to provide insight into the insights of a small group of purposively selected participants: health systems and community partners who self-identify as engaging with the healthcare anchor model. Transferability is the extent to which findings from this study can be specifically understood as a "relative truth." The theoretical frameworks for this research speak to analogous but distinct phenomena – for example, health systems' general approach to addressing social determinants of health, but a key feature of the methods described above is that they provide specific insight into the healthcare anchor lens (which is still being actively defined and shaped by the industry). In order to ensure that the findings from this study are appropriately transferable to other contexts, this study is explicit

about the methods utilized, the way that the research questions build on existing literature, and the specifics of method design as well as sample selection.

Dependability. The context for qualitative findings evolves over time,[77] and strong qualitative research designs ensure that the reality that is being jointly developed between the researcher and respondent is clearly outlined and documented. Throughout the study, several steps were taken to ensure dependability, including the outlining and codification of various protocols such as those for document and interview coding, the specific development of interview guides based on the research questions, and ongoing documentation of changes to study protocol. Documenting these ongoing adaptations provides additional context for the findings and the specific way that they were interpreted, providing other researchers with insight into the specific strengths or limitations of the study.

Confirmability. The interpretivist paradigm acknowledges that a researcher is not value-free, but rather brings a specific set of perspectives to the research, alongside the respondent. Study confirmability, therefore, is reliant on transparently articulating the various biases of the researcher and working to mitigate any specific risks that might pose to the study. One best practice for ensuring dependability is the upfront identification of biases, which was conducted through ongoing written and voice memos in each part of the study, reflecting on what was coming up for the author and how this might impact analysis. Results were also grounded in explicit data, including the survey results as well as quotes from the stakeholder interviews that directly illuminate the key themes from the study. Furthermore, a second coder – a person with no prior knowledge of the study – was engaged in code development to provide additional mitigation against researcher values and biases.

CHAPTER 4: MANUSCRIPT 1 – Understanding Healthcare Anchor Model Adoption and Motivators: A Survey of U.S. Health Systems[i]

4.1 ABSTRACT[ii]

One framework that has emerged to guide investments in social determinants of health is the "healthcare anchor" model, in which hospitals recognize their role as local economic engines and utilize investment, procurement, and other institutional assets to address determinant root causes, such as economic inequity.[78] Little is known about how health systems define and operationalize the anchor model internally.[79] A survey of 42 health systems that are members of the Healthcare Anchor Network was conducted. 50% of respondents had an institution-wide anchor mission, and 96% of respondents were implementing 2 or more specific anchor strategies. Results indicated that health systems are engaged in diverse forms of anchor strategy implementation with considerable institutional buy-in.

4.2 INTRODUCTION

In recognition of evidence that the conditions in which people work and live have a significantly greater impact on health outcomes than medical care alone,[80] health systems are increasingly focused on addressing the social, economic, and environmental factors that influence health outcomes.[81] These interventions can take many forms, from screening patients for social needs to providing direct connections to job training, food security, and transportation resources.[82] One framework intersecting with health systems' activities to address determinants of health is the "healthcare anchor model."[83] The phrase anchor institutions, used to refer to

[i] This paper is targeted for submission in Health Affairs as a Research Article. The word limit is 5000 words.
[ii] Health Affairs format requires an abstract to be no more than 150 words.

universities, hospitals, and other large institutions with a commitment to place, first emerged in the 1960s[84] and then gained prominence in the mid-1990s, as reports by policymakers highlighted the importance of these entities playing a community stewardship role.[85] This role aligned with institutional missions focused on local service and emphasized the interdependent relationship between that institution and their environment – for example, an institution's ownership of local land and reliance on surrounding neighborhoods for workforce supply.[86] In this vein, anchors were recognized as local economic actors with opportunity leverage their operational revenue – for example, investment or purchasing finance streams – to strengthen economic opportunity at the local level.[87]

Adoption of the anchor concept by health systems appears to be driven by several forces.[88] Some health systems – for example, those with a faith-based orientation (i.e. Catholic hospitals), have historically contributed to food, housing, and other social services through philanthropic levers. For these institutions, anchor strategies represent an extension of previous "charity-based" work by considering how investment spending and other core financial assets can also be leveraged to tackle upstream determinants.[89] Similarly, some public health systems and safety net hospitals have traditionally engaged in practices such as local purchasing as a result of government or institutional mandates.[90] Healthcare industry standards have also increasingly pointed to the importance of the anchor role: in 2017, The National Academy of Medicine (NAM)'s Population and Preventative Health Advisory Board, referencing initial research conducted by the national nonprofit The Democracy Collaborative, identified the healthcare anchor model as an important strategy in achieving health equity. In their "Pathways to Health Equity" framework, NAM stated that institutions should deploy "specific strategies to address the multiple determinants of health on which anchors can have a direct impact or

through multi-sector collaboration; and [assess] the negative and positive impacts of anchor institutions in their communities, and [identify] how negative impacts may be mitigated."[91]

Lastly and significantly, adoption of the anchor model has been influenced by the changing nature of healthcare itself, including enhanced community benefit requirements under the Affordable Care Act.[92] With increased focus on social determinants of health, as well as payment reforms that hold hospitals accountable for metrics such as repeat emergency room readmissions, health systems now have additional financial incentive to initiate or continue investing in upstream services that may prevent their patients from seeking medical services in the first place.[93] As discussion of social determinants of health becomes more prevalent in the context of U.S. healthcare, many health systems leaders are also finding that they must tackle more structural determinants of health inequity as described by the World Health Organization.[94] For example, a health system may find that only addressing immediate concerns that arise with their patients – for example, connecting a food insecure patient to emergency food assistance – is insufficient in driving long-term improvement in health outcomes. As a result, institutions have turned to the healthcare anchor model as they explore strategies to improve the "causes of the causes" – in this case, a patient or community's socioeconomic position – itself one of the most primary drivers of health outcomes.[95] Anchor strategies lay out a specific template for doing so: for example, a health system may choose to shift its institutional procurement practices so that a higher percentage of vendors are local, diverse food producers who in turn can supply healthy and fresh food options. This may also lead to creation of new employment opportunities in neighborhoods where unemployment, and the food insecurity that is associated with it, are key drivers of poor health outcomes.[96]

Despite the proliferation of the anchor framework across the healthcare industry, there has been little research insight into the operationalization of healthcare anchor strategies within health systems. While case studies and reports that describe health system activities that fall under this designation have been published in various forums,[97-98] there has been limited peer-reviewed literature to date of the industry-level adoption of this model, the types of anchor strategies that health systems are adopting, their motivations for doing so, nor the level of internal buy-in for these strategies. As increasing numbers of health systems turn to the anchor approach and incorporate it into their organizational priorities,[99] there is a need for additional empirical methods to understand, assess, and inform this approach. Here these needs are addressed via the following research aims: first, documenting how health systems institutionalize the healthcare anchor model in terms of organizational mission and leadership-buy in, and second, what types of anchor strategies health systems are engaging in.

4.3 STUDY DATA AND METHODS

Healthcare Anchor Network Membership

The Healthcare Anchor Network (the Network) is a collaborative of 50 systems that comprise 700+ hospitals that have self-identified as adopting healthcare anchor strategies. It was established in 2017 with coordinating support from The Democracy Collaborative, which engages in research and practice focused on building a more democratic economy. Via working groups, in-person convenings, and organizational coaching, the Network provides technical assistance to member health systems in initiating, implementing, and institutionalizing anchor strategies. Members of the Healthcare Anchor Network have identified eight core anchor strategies (see Appendix A). Four of these – hiring, purchasing, investment, and real estate and

facilities – describe discrete economic assets owned by the institution. The other four – philanthropy, community collaboration, policy, and evidence-base building – describe discretionary and functional assets that the health system can deploy in support shifting the four economic asset types above (see Appendix A for further detail).

Forty-two health systems who were members of the Healthcare Anchor Network as of May 2019 were included in the study sample. The list of existing members was assembled from an internal list maintained by staff from The Democracy Collaborative. This list, which contains both health system names as well as a "lead contact" for each health system – typically an executive sponsor and/or project manager responsible for insight into anchor strategies taking place across a system – was obtained from The Democracy Collaborative.

Survey Development

The survey was designed via an iterative process that incorporated input from staff at the Healthcare Anchor Network as well as public health network experts at the University of Colorado at Denver Center for Network Science. Prior to survey development, a framework outlining key research concepts was developed, along with several key question domains that pertained to those research concepts. Identified domains included (1) general health system priorities; (2) presence of a healthcare anchor mission; (3) level of adoption of healthcare anchor mission (i.e. whether executive-level, business unit-level, or frontline staff are bought in); (4) reasons for adopting the healthcare anchor mission; (5) type of anchor strategies currently being implemented; (6) level of scale for anchor strategy; and (6) individual and health system respondent demographic information. Measures were identified for each survey domain, and pertinent questions were designed to assess each measure. Depending on the question format,

Likert scales (i.e. “strongly disagree, disagree, neither agree nor disagree, agree, strongly agree”) or yes/no responses were provided. Open-ended qualitative questions were also developed to provide additional insight into health system perceptions and motivators.

Additionally, given the nascent nature of the healthcare anchor model, The Democracy Collaborative staff assisted with ensuring the survey utilized specific terminology and language that has been developed by the health system members of the Healthcare Anchor Network. For example, “healthcare anchor mission” was defined as “an institution making a commitment to intentionally apply its long-term, place-based economic power and human capital in partnership with its community to mutually benefit the long-term well-being of both.” This definition, developed through a Network-led participatory process, is distinct from engaging with the healthcare anchor model more generally, which may include singular anchor strategies at the business unit level but do not take place in the context of an institution-wide commitment.[100] Finally, descriptive data including health system type, total employees, duration of membership in the Network, and organizational type were also obtained from The Democracy Collaborative.

Survey Administration

The survey was administered electronically from October 4th, 2019-December 31, 2019.

Data Analysis

Response data were analyzed using descriptive statistics, and descriptive measures including geographic region (Northeast, South, Midwest, West, Mid-Atlantic, National), total size of the health system (based on number of employees), length of membership duration in the Network, and health system type to assess the representativeness of the sample within the Network. In addition to quantitative analysis of survey questions, free-text responses to open-

ended questions were analyzed by coding responses and organizing them by theme. A second coder also reviewed the free-text responses and the thematic organization scheme was discussed and reconciled with the primary researcher (S. Sarkar).

Limitations[iii]

This study was designed to collect and describe perceptions of health care systems about anchor network strategies. Survey non-response may limit the generalizability of the data. The characteristics of responders were compared to the characteristics of non-responders, finding that the average health system size for non-responders was slightly smaller (~39,000 employees) than for responders (~47,000 employees). The geographic distribution of respondents and non-respondents was not significantly different, although health systems in the West were slightly more represented in the respondent population (21%) than in the non-respondent population (14%).

Second, the sample was limited to systems that were members of the Healthcare Anchor Network. It seems likely that those who are not involved in the network may be less engaged in anchor strategies. Third, the survey respondents were individual representatives of health systems ranging from hundreds to hundreds of thousands of employees, and as such represent only one point of view into the institutional adoption of healthcare anchor strategies, whereas additional points of contact per system may have yielded a more composite view. However, respondents were identified specifically in their role as lead contacts for anchor strategies at their institutions and were therefore knowledgeable about their institution's anchor engagement institution-wide. Respondents may also have been prone to social desirability, given their

[iii] Health Affairs format places the "Limitations" section under Study Methods rather than in the Discussion.

identification as healthcare anchors and desire to demonstrate their successes in operationalizing that designation.

4.4 STUDY RESULTS

Sample

Of the 42 lead contacts from the Healthcare Anchor Network contacted to participate in the survey, 28 responded, resulting in a response rate of 67 percent. The health systems were distributed throughout the U.S., with the highest concentration in the Northeast (36%, Exhibit 1). Health systems serving more than one geographic area were categorized as "National." Nearly half of health systems were mid-sized hospitals with between 10,000 and 50,000 employees, and half of respondents self-identified as academic medical centers.

In assessing the profiles of the individuals who responded to the survey on behalf of their health system, roughly half were at the executive level (54%), occupying Vice President or C-Suite roles within their institutions. The other half were business unit leaders (21%), directors (21%), and managers (14%) with direct responsibility for anchor mission implementation. The functions represented by these respondents included community/population health, human resources, government relations, social impact, and community relations.

Exhibit 1 (Table 2): Health System Characteristics[iv]		
	Percent	**Number**
Geographic Distribution		

[iv] Health Affairs refers to any figures or tables as "exhibits". Up to 4 exhibits are allowed per paper. This table format is also in compliance with journal guidelines.

Midwest	25	7
National	14	4
Northeast	36	10
South	4	1
West	21	6
Number of Employees		
<10,000	32	9
10,000 to <50,000	43	12
50,000 to <100,000	11	3
100,000+	11	3
Length of Membership in Healthcare Anchor Network		
0-3 months	7	2
4-12 months	4	1
13-23 months	25	7
24 months+	64	18
Health System Type		
Private non-profit	89	25
Public	11	3

Indicators of health system adoption of healthcare anchor model

Half of respondents identified as having a comprehensive, institution-wide healthcare anchor mission, 39% viewed the positioning within the system as a health system wide priority, and 46% viewed executive leadership as either very engaged or fully committed to anchor strategies. In contrast, 29% did not view their health system as having a comprehensive mission,

and 21% of respondents were not sure.

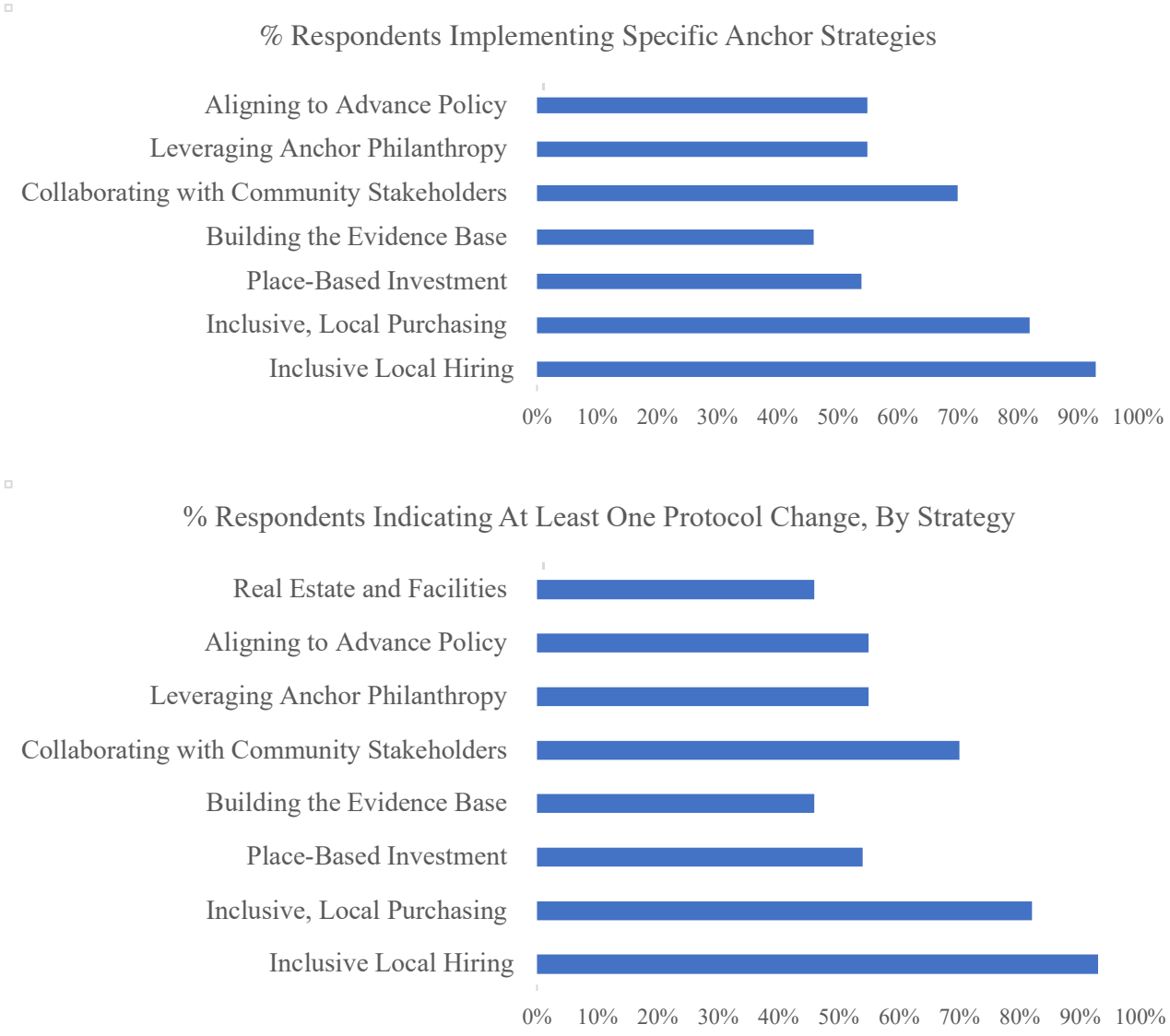
Exhibit 2 (Table 3): Indicators of Adoption		
	Percent	**Number**
Identifies as having a comprehensive, institution-wide healthcare anchor mission		
Yes	50	14
No	29	8
Not Sure	21	6
Anchor mission positioning within hospital/health system		
Health system-wide priority	39	11
Departmental or multi-departmental priority	60	14
Other	11	3
Internal Stakeholders Very Engaged or Fully Committed in Anchor Strategies		
Executive Leadership/C-Suite	46	13
Purchasing Business Unit Leaders	46	13
Human Resources Business Unit Leaders	29	8
Investment Business Unit Leaders	39	11

Operationalization of Anchor Strategies by Type

Within strategies, adoption of inclusive, local hiring (ILH) and inclusive, local purchasing (ILP) practices were the most prevalent, as was collaboration with community stakeholders. Relatedly, more than 80% of respondents identified that they had implemented one or more anchor-related process changes related to ILH and ILP. 96% of respondents were implementing 2 or more distinct types of anchor strategies. However, a very limited number of respondents (range of 4%-

18% depending on the strategy) indicated that they had fully scaled any of their anchor strategies to the institutional level.

Exhibit 3 (Figure 7): Operationalization of Anchor Strategies



External and Internal Motivators for Adopting Anchor Mission

Several themes emerged as internal and external motivators for adopting the healthcare anchor model (Exhibit 3). Internal motivators included a commitment to organizational mission, vision, and values, a desire to try new or innovative methods to tackle social determinants of health, and the use of the healthcare anchor model as a unifying framework for diverse branches of work related to social determinants, community health, population health management, and more.

External motivators included regulatory pressures, meeting quality measures, and competition for market share as well as reputation management. Cost management was also a frequently stated motivator, although several health system respondents emphasized that cost savings was not the primary driver for their implementation of healthcare anchor strategies.

Exhibit 4 (Table 4): Motivators for Adopting the Anchor Mission

Motivators for Adopting the Anchor Mission:	**Examples from Open-Ended Responses:**
Local, state, and federal regulatory requirements (e.g. community benefit, state payment reform requirements, cost and quality standards)	**“**We are paid in a bundle system that creates pressure to address population health management and address social aspects of health in our community to drive down utilization and costs and focus on positive health outcomes. “
Commitment to organizational mission, values, and culture	**“**While we have long strived to act in the best interest of our communities, the anchor mission is a valuable framework for organizing and articulating our strategies, actions, and vision as we navigate this transition.”
Competition for patient market share	“We're losing patients and talent to other places due to the region's skyrocketing costs, which is compelling our institution to look to community hire strategies and ways to leverage our own institution's resources.”

Brand or reputation-related advantages	"Reputational pressures are also beginning to grow as other health systems address these issues aggressively."
Improving health outcomes generally	"Everything that we are doing for our anchor mission goes beyond any regulatory requirements or quality measures. The main external pressure is rising cost of care due to widening gaps in social health (housing security, food security, financial security) which are contributing to negative health outcomes."
Desire to address social determinants of health (e.g. housing, food, transportation)	"Our Community Health Needs Assessments call out specific social determinants of health that are addressed by anchor strategies."
Desire to address structural determinants of health (e.g. income inequality, structural racism)	**"**[External pressures include] institutional racism, entrenched health inequities, income inequality, displacement/ gentrification."
Alignment with organizational strategy	**"**We see our anchor strategies as part of an overall strategy to promote the economic well-being of our patients and the community."
Unifying framework for social determinant of health strategies	**"**There are many different initiatives within [our institution] that are mission-aligned but not coordinated. We see the [healthcare anchor] strategy as a way to help provide structure to our approach in this space."

Most (86%) respondents also indicated that they utilize healthcare anchor language and messaging, rather than solely utilizing population health/community benefit language, when creating buy-in internally for anchor-related activities.

4.5 DISCUSSION

The healthcare anchor model, despite being a relatively new phenomenon, is being widely adopted by a number of health systems with diverse characteristics. However, there is a dearth of peer-reviewed literature examining the healthcare anchor model closely, particularly in

terms of adoption and institutionalization. This study sought to address this gap by documenting the specific ways that health systems create buy-in for the anchor mission, as well as identifying types of anchor strategies that health systems are implementing. The majority of the literature examining hospital spending on social determinants of health centers around hospital community benefit spending or grant-based programs.[101] However, the focus of the healthcare anchor model is leveraging operational financing streams – such as institutional procurement spending or investment portfolios – towards even more upstream community investments. Recent research shows that overall health system investment in determinants of health is still relatively small compared to total community benefit spending -- $2.5 billion over the past two years – and an even smaller portion of that is in the form of deploying operational revenue.[102] However, the level of adoption of anchor strategies demonstrated through the survey responses indicates that there is potential for this overall investment number to grow as those who self-identify as healthcare anchors deepen their practices, and also as additional health systems opt-in to this approach.

One key feature of this study was direct feedback from health systems leaders regarding their motivations for pursuing healthcare anchor strategies, which may provide additional insight into what enables a particular level of buy-in within any given health system. Prior studies have posited that health systems are compelled to invest in social determinants as a result of their mission and values, rather than a clear case for economic return.[103] However, with respect to engaging in anchor-related activity, respondents regularly cited both business-related motivators as well as mission-related motivators for pursuing anchor strategies. Cost management and desire to maintain market share were referenced by a majority of respondents in their open-ended responses, indicating that anchor strategies are indeed being implemented and tested for their

potential cost savings or return on investment potential. However, respondents also regularly cited a desire to actually impact health outcomes by looking to the structural determinants of health, including economic inequality. Given that anchor strategies such as shifting procurement practices or engaging in new investments in affordable housing draw upon a health system's operational budget lines – distinct from their community benefits requirement or their philanthropic functions – understanding how anchor strategies define and strategically align their place-based imperative is key.

Existing literature examining interventions that address social determinants tend to focus on whether community investments exist at all or whether they are growing. However, it has been less discussed that proliferation of health system engagement on the social determinants of health can result in siloed, uncoordinated efforts that create challenges both institutionally as well as within the communities those initiatives are intended to support.[104] In addition to exploring the anchor subcategory of place-based investment, our findings point to the potential for the anchor model to improve alignment efforts across an institution – particularly those focused on not just social but also economic determinants of health – given high-level buy-in from health system leadership. Institutional commitment to the anchor mission amongst respondents was high: half indicated that they had a health system-wide focus on anchor strategies and nearly half identified that there was executive or C-Suite buy-in for that work, indicating that these anchor activities are not just taking place as a result of individual business unit champions or in the form of singular pilots. A significant percentage of respondents (86%) highlighted their preference for utilizing healthcare anchor language and strategy rather than solely utilizing population health/community benefit language to create internal buy-in,

indicating that the healthcare anchor model may prove uniquely unifying across diverse internal audiences when compared to other community health frameworks.

Overall, the results of this study demonstrate that healthcare anchor strategies are being adopted by a variety of nonprofit and public health systems. These efforts are nascent and growing but currently still represent a small fraction of the overall industry trend towards hospital investments to address community-level health inequities. While this analysis provides a first look at institutional adoption and motivators as described by self-identified healthcare anchors, there remain several areas for further exploration. First, the limited literature that does exist with respect to healthcare anchors typically presents this phenomenon in the context of addressing social determinants of health such as food, housing, transportation, etc. Self-identified healthcare anchors, however, express an interest in adopting the anchor framework specifically when they feel other strategies to address health inequities have not been effective. As one respondent stated, "economic security… is the most prevalent topic in our community health needs assessment." While the conversation on social determinants has predominantly focused on meeting patients' basic social needs and is now shifting towards actual investments in social determinants themselves, the anchor model represents an additional frontier: asset-based investment strategies to address economic determinants of health. In pledging institutional dollars towards initiatives that are intended to generate local jobs and support local enterprises, the healthcare anchor model may demonstrate a pathway for health systems to play a role in addressing the "causes of the causes" of poor health – i.e. poverty and community disinvestment.

Second, further evaluation is needed to determine if these strategies are actually impacting health outcomes and health equity at the community level. More than half of respondents indicated that they were pursuing efforts to build an evidence base regarding the

impact of the anchor model, which is in alignment with previous analyses that have shown that there is generally limited evidence demonstrating the cost and outcome-related impacts of health system social investments.[105] In addition to scarce quantitative impact analyses, there is scant literature examining the impact of the healthcare anchor model from the perspective of other local stakeholders. Existing anchor case studies tend to describe positive successes, but few analyses have delved into the operational barriers and challenges faced by anchor institutions as well as their community partners. Anchor strategies, like social determinant of health interventions, typically involve a significant set of local stakeholders outside of the health system, raising the need for capturing the perspectives of those stakeholders in understanding the anchor model as well. Furthermore, as one of the stated aims of health systems adopting the healthcare anchor model was improving health equity, future research on this topic should both explore the healthcare anchor phenomenon through the community stakeholders that they partner with and seek to support, as well as delve into the manifestations of health equity within anchor work.

4.6 ACKNOWLEDGEMENTS

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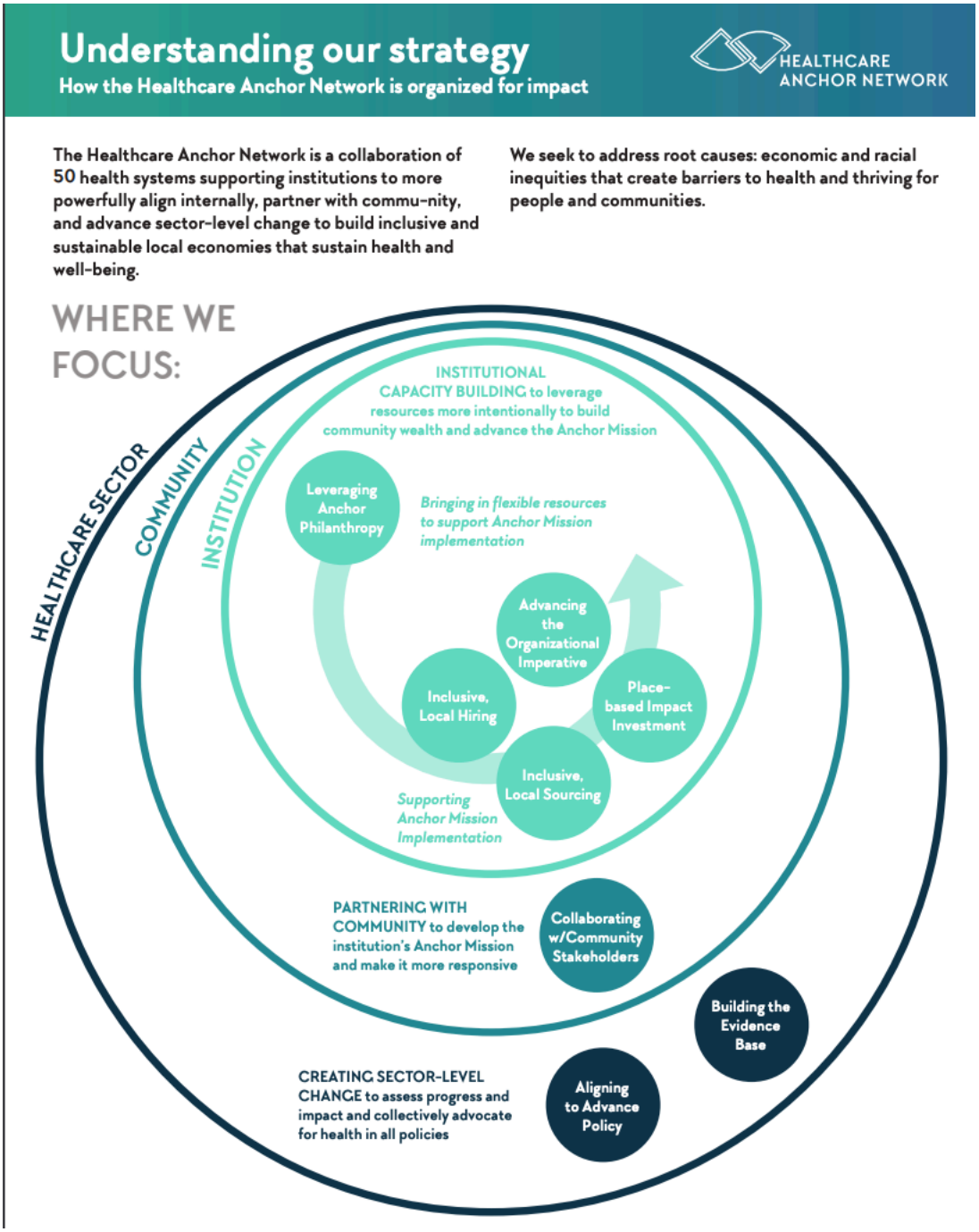
4.7 APPENDIX A

Appendix A Exhibit 1 (Table 5): Health System Characteristics (Respondents v Non-Respondents)

Exhibit 1 (Table 2): Health System Characteristics				
	Respondents		**Non-Respondents**	
	Percent	**Number**		
Geographic Distribution				
Midwest	25	7	29	4
National	14	4	14	2
Northeast	36	10	36	5
South	4	1	7	1
West	21	6	14	2
Number of Employees				
<10,000	32	9	7	1
10,000 to <50,000	43	12	50	7
50,000 to <100,000	11	3	14	2
100,000+	11	3	14	2
Unknown	NA	NA	14	2
Length of Membership in Healthcare Anchor Network				
0-3 months	7	2	14	2
4-12 months	4	1	14	2
12-23 months	25	7	21	3
>24 months	64	18	50%	7
Health System Type				
Private non-profit	89	25	93	13
Public	11	3	7	1

Appendix A Exhibit 2 (Figure 8): Healthcare Anchor Network Anchor Strategies



Appendix A Exhibit 3 (Figure 9): Healthcare Anchor Network Health System Assets

CHAPTER 5 – MANUSCRIPT 2: Analysis of Barriers and Facilitators in Implementing Healthcare Anchor Strategies to Address Food Systems Inequities[v]

5.1 ABSTRACT

Hospitals, incentivized by healthcare reform to focus on upstream factors – such as food security and socioeconomic status[106]– that impact patient health, are increasingly engaging with their community food systems.[107] While this engagement can take many forms – for example, a health system connecting a patient to emergency food assistance in their neighborhood[108] – there has been limited exploration of the intersection of these efforts with the "healthcare anchor" model. In this model, health systems acknowledge their role as place-based economic engines and leverage their institutional practices – including procurement and investment – to address upstream determinants of health such as availability of healthy, fresh food as well as employment opportunities within the food sector.[109] Qualitative interviews were conducted with 20 healthcare and community representatives who were purposefully selected based on their implementation of healthcare anchor strategies that focus on food as a driver of health. Several themes related to facilitators and barriers of this work emerged, including the value of aligned missions across stakeholders, variations in organizational culture and expectations between health systems and community partners, and challenges with scale and institutionalization. Respondents also identified tradeoffs such as short-term progress versus long-term outcomes. Despite these issues, healthcare and community representatives alike experienced value and expressed optimism regarding the potential for healthcare anchor strategies to improve short-term food security as well as long-term community food system sustainability.

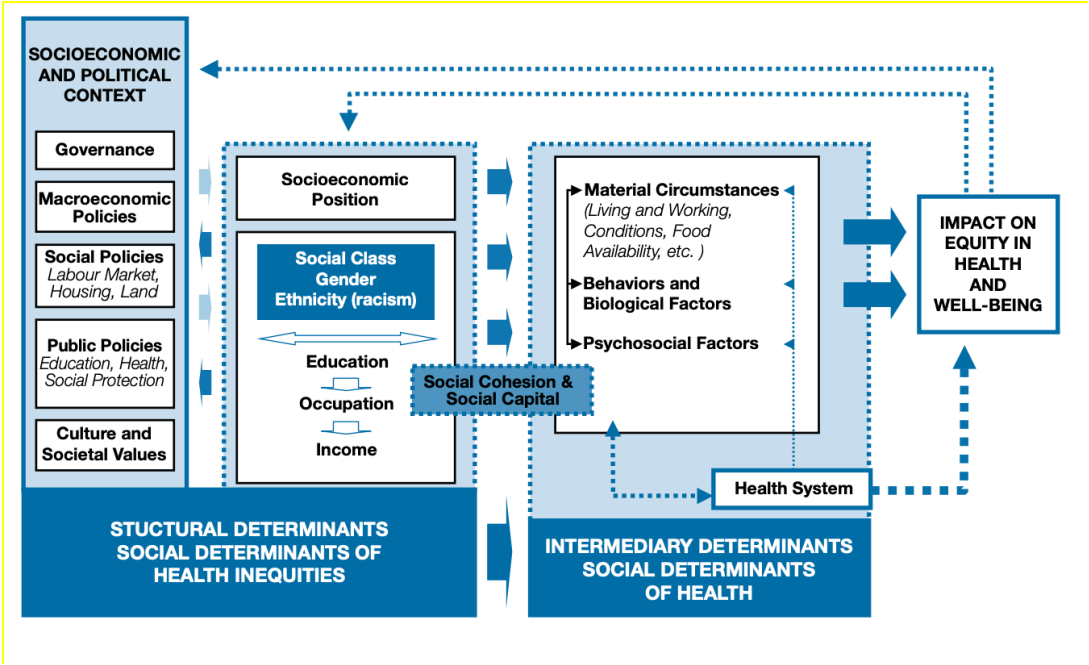
[v] This paper is targeted for submission in the Journal of Agriculture, Food Systems and Community Development as a Research Article. The word limit is 7500 words.

5.2 INTRODUCTION

The Affordable Care Act (ACA) incentivized hospitals to focus on the social determinants of health – such as mandated community health needs assessments and improvement plans.[110] One emergent framework in light of this increased focus on social determinants of health is that of the "healthcare anchor" model.[111] The concept of healthcare anchor institutions is derived from a similar model in which universities were acknowledged as "anchors"[112] that deploy significant financial and human resources with the potential to address community challenges. This framing acknowledges that the well-being of the institution, with its commitment to remain in the community long-term and reliance on local workforce and assets, is tied to the well-being of its surrounding neighborhoods.[113] Health systems, with their long-term, place-based economic power, often interact with their environs in a similar way. However, there is little research that examines the impact of hospitals in the anchor role within the United States.[114] While there has been considerable exploration of the impact of community benefits spending and the establishment of partnerships between hospitals and community stakeholders,[115] little of this research focuses on the anchor approach: that is, health systems leveraging their operational assets (hiring, investment, procurement) with the purpose of strengthening local social and economic conditions.

The anchor framework is underexplored across all social determinant categories, including food security and food systems – even though the existing literature identifies these topics as a key priority for healthcare institutions.[116] Food systems span multiple intermediary determinants as well as structural determinants as defined by the World Health Organization's Social Determinants of Health Conceptual Framework (Figure 1).

Figure 1 (Figure 10): WHO Social Determinants of Health Conceptual Framework



Food systems intersect with several points on the WHO framework: for example, availability of healthy and fresh food is an intermediary determinant that then relates to clinically-relevant factor such as diet and disease prevalence. Food production forces, such as the presence of food vendors who hire locally, in turn influence the structural determinants of occupation, income, and socioeconomic position. Policies related to food environment, retail, and supply chain also influence these structural determinants.

Second, addressing food insecurity via healthcare institution activities has historical precedence: many health systems have long maintained food pantries or developed connections to local food banks to supply their patient population with emergency items.[117] Today, hospital programs that screen patients for food insecurity and link them to local resources or work to enroll eligible patients in nutrition assistance programs such as SNAP (Supplemental Nutrition Assistance Program) or WIC (Woman, infants, and Children) also exist.[118]

Third, health systems are additionally engaged in food systems beyond the individual patient level: hospitals are significant purchasers of food and have been involved in movements to procure locally, promote environmentally sustainable supply chains, and secure healthy food for patient meals.[119] Recognizing these various points of intervention, the American Hospital Association published its guide, "Reducing Food Insecurity and the Role of Hospitals," in 2017, outlining food system investments such as food advocacy and investments in the emergency food system. Health Care Without Harm, a nonprofit organization focused on transforming the environmental practices of health systems, issued a "Healthy Food Playbook" in 2018, offering resources to guide investments in initiatives that improve community food environments.[120] These examples demonstrate the importance of assessing the anchor model specifically as it relates to hospital investments in food systems, as proposed in this study. Through procurement and investment, hospitals can impact a determinant of health at multiple levels of change.

5.3 SIGNIFICANCE

This research addresses a gap in the literature while also providing valuable insights for health systems and community partners engaged in food system-related anchor strategy implementation. There is limited research on healthcare anchor strategy implementation in general, and virtually none examines how healthcare anchor strategies might intersect with community food systems. Furthermore, while much has been published on the subject of hospitals engaging in short-term strategies around food systems[121] – for example, screening patients for food insecurity or referring them to a local food pantry – this research focuses on interventions that also address food insecurity through longer-term economic and community wealth-building strategies. Lastly, while literature related to the healthcare anchor model

predominantly features the perspectives of health systems, this research seeks to highlight the insights of community partners, who are crucial to the design, vision, and implementation of anchor strategies. The research herein addresses these gaps in the literature by addressing the research aim of documenting health system and community partner perspectives on the operational facilitators and barriers of healthcare anchor activities that focus specifically on food systems and sustainability.

5.4 METHODS

The questions addressed herein are part of a larger, mixed methods study of healthcare anchor institutions. The first part consisted of a national survey administered online to members of the Healthcare Anchor Network – health systems who self-identify as healthcare anchors. This survey was complemented with a series of in-depth key informant interviews with stakeholders in healthcare anchor networks where food systems are one area of focus. Findings from these interviews address the questions addressed in this manuscript and explore in greater depth the trends and motivators identified through the survey.

Sample

To identify healthcare anchor institutions engaged in food systems interventions, the researchers utilized the 42 health systems that were members of the Healthcare Anchor Network (the Network), as of September 2019. The list of existing members was assembled from an internal list maintained by staff from The Democracy Collaborative (TDC), a national nonprofit focused on democratic economy strategies that serves as the coordinating organization to the Network. From this list, a purposive sample of health systems that were known to staff at The

Democracy Collaborative to be engaging in anchor strategies related to food was developed. This sampling method was not representative –instead, it was designed to ensure that participants could provide a robust and nuanced perspective into anchor food systems strategy implementation.

Five anchor health systems focused on food-related anchor strategies were identified and outreach was conducted with the lead contact for each health system as designated by The Democracy Collaborative staff. The lead contact was typically an executive sponsor or project manager responsible for insight into anchor strategies taking place across their health system. Each lead contact was sent an email invitation to participate in the study as a key informant interviewee. Snowball sampling[122]was utilized to identify additional staff at each health system, as well as community partner representatives engaged in the anchor strategy, at each of the five health systems.

Data Collection

The interviews were conducted by the primary researcher (S. Sarkar). Two interview guides – one for healthcare representatives and one for community representatives – were developed based on the survey findings from part 1 of the larger study, existing literature regarding anchor strategies and food systems, and the study aims. The interview questions focused on the genesis and structure of the anchor strategy, how it related to an institution's anchor mission or understanding of the anchor mission, how the initiative intersected with food systems, and reflections on barriers and facilitators to implementation (Table 1).

All interviews except for two took place in-person at the healthcare institution or community organization of the interviewee; the remaining interviews took place via Zoom video

conference call. Video calls were conducted due to preemptive researcher caution regarding air travel at the end of February, in light of the emergence of COVID-19. All interviews took place between January 15th, 2020 and February 28th, 2020. Interviews were digitally recorded and transcribed by a professional transcription company. A preliminary codebook was developed based on the existing literature, the study aims, and an initial review of the interview transcripts. To refine the codebook, an iterative process was undertaken as the codebook was applied to each transcript and reviewed for themes, emergent concepts, and coding consolidations or additions. To ensure rigor, a second coder who was not part of the study team was engaged to apply the framework and propose further refinements to the codebook. A final codebook was then developed by the primary researcher and applied to all transcripts using MAXQDA qualitative data analysis and research software. Utilizing a content analysis approach, key themes and representative quotes were identified. All data were de-identified to ensure the confidentiality of participants.

Table 1 (Table 6): Interview Guide for Healthcare and Community Representatives

Introductory Questions	*Can you state your name?*
	What is your organization and role at that organization?
	Can you describe [insert anchor food systems initiative here]?
	What is your specific involvement in the initiative?
Anchor Initiative Details - General	*How did the initiative start?*
	Who are the stakeholders involved in the initiative?
	What is the governance structure for this initiative?
	How is the initiative funded?
	Tell me about the intended goals and outcomes for the initiative.
Defining Anchor Roles	*How would you define what it means to be an anchor institution?*

	[FOR HEALTHCARE] How does your institution operate as an anchor institution?
	[FOR COMMUNITY] How does your institution interact with anchors?
Defining Food Systems	*What is your institution's overall approach to engaging with the food system? How does this initiative fit into that?*
	How does this initiative address inequities in the food system?
	[FOR HEALTHCARE] How does your institution's food systems strategy align with your institution's anchor strategy?
	[FOR COMMUNITY] How does engaging in this anchor initiative align with your organization's overall food systems strategy and vision?
Reflections on Barriers/Facilitators	*What are the challenges this initiative faces in achieving its goals and outcomes?*
	What factors have been helpful for this initiative in achieving its goals and outcomes?
	Of those challenges and facilitators, do you think any are unique to anchor institution partnerships specifically?
	What advice would you give to another group hoping to launch a similar initiative?
	What has been the initiative's greatest accomplishment thus far?
	What factors enabled this accomplishment?
	What has been the biggest lesson learned?
Conclusions	*Is there anything else you would like to tell me about this initiative?*
	Is there anyone else I should talk to in order to understand the initiative?

5.5 RESULTS

The primary researcher spoke with representatives from each of the five healthcare systems identified and representatives from their community partners for a total of twenty individuals: twelve health system representatives, spanning from program staff to executives, as well as eight community partner representatives.

The first part of the results from these conversations provides a descriptive understanding of the types of anchor strategies respondents spoke to, including what types of stakeholders were involved, what type of anchor lever they utilized, and what food system-related goals the intervention aimed to address. Table 2 outlines characteristics of the respondents and Table 3 identifies the specific food systems-focused anchor initiatives that were discussed. These descriptors provide insight into the specific strategies that were pursued, particularly as there was wide variance in terms of the scope of each partnership. Furthermore, these characteristics help contextualize the themes that arose regarding barriers and facilitators to implementation.

The second portion of these results is organized by the key themes that arose from the interviews. These themes fall into the following categories: (1) facilitators of anchor strategy implementation; (2) barriers to anchor strategy implementation; (3) additional polarities and aspirations for partnership.

Description of Interview Participants

The final sample consisted of healthcare and community stakeholders representing 12 institutions (including five healthcare systems) throughout the United States, at both the national level (n=3) and regional level (n=9). At the regional level, institutions represented the Northeast (n=5), the Midwest (n=3), and the Mid-Atlantic (n=1). The national organizations referred to anchor strategies taking place in the West (n=2) and the Mid-Atlantic (n=1). The duration of the anchor strategies discussed ranged from 1-13 years; most had been in place for 2-5 years (0-1 year: n=1; 2-5 years: n=6; 5-10 years: n=1).

Table 2 (Table 7): Individual and Institutional Respondent Characteristics

	Percent	Number
Interviewee Role		
Hospital program staff	15	3
Hospital mid-level management staff	35	7
Hospital leadership	10	2
Community partner program staff	10	2
Community partner leadership	30	6
Departments for health system respondents		
Procurement/supply chain	17	2
Food services	25	3
Community health	50	6
Development	8	1
Community partner business model		
Nonprofit	71	5
Small business	14	1
Cooperatively owned business	14	1
Community partner food systems focus		
Food producer – farm	29	2
Food distributor	100	7
Food business incubator	14	1

Individual respondents reflected a wide variety of backgrounds ranging from healthcare administration to nutrition and dietary services to community organizing. Importantly, both healthcare system and community representatives represented a diversity of roles within their

institutions. Titles for hospital participants included Food Service Director, Director of Supply Chain Administration, and Community Health Manager. Titles for community participants included Founder and Executive Director, Food Access Coordinator, and more. Given the economic focus of anchor strategies, community-based partners were not exclusively nonprofit organizations or service organizations: 3 out of 7 community partners were in formal vendor contract relationships with their health system counterparts.

Table 3 (Table 8): Anchor Initiative Characteristics

	Percent	**Number**
Stated aspiration of initiative		
Decreasing patient food insecurity	85	6
Improving nutritional value of patient home meals	85	6
Improving nutritional value of patient health system meals	29	2
Shifting purchasing to local, diverse vendors	57	4
Supporting local food production and farming	100	7
Strengthening community food systems	29	2
Addressing economic insecurity	71	5
Enabling community wealth-building	29	2
Leveraging anchor economic, discretionary, and functional assets		
Economic Assets		
Procurement/supply chain	57	4
Investment	14	1
Discretionary and Functional Assets		
Philanthropy	100	7
Community benefit	29	2
Policy	29	2

Food Systems Anchor Initiatives Underway

Food systems anchor initiatives ranged from efforts focused on the immediate availability of fresh, healthy food to broader efforts to support food producers and businesses. Specific examples included (1) efforts by health system leadership, supply chain staff, and community health staff to shift a certain percentage of their hospital food procurement towards minority or women-owned vendors who are local, and engage in practices to source sustainably; (2) a partnership between a health system and community partner to develop a community-supported agriculture program for patients that addresses short-term food insecurity while also supporting the community partner in its land ownership, farmer employment, and community advocacy strategies; (3) health system investment and procurement support for a regional, sustainable food production hub, developed with input from local food activists and experts, that produces significant numbers of healthy and locally-sourced meals to be distributed to local health systems and other anchor institutions.

Table 4 (Table 9): Key Interview Themes

Facilitators	**Barriers**
Shared values between partners	Issues with scale and volume
Individual champions inside hospital	Differences in organizational culture and practice
Hospital executive leader support	Limited case for funding
Partner adaptability and flexibility	Power dynamics between partners
Risk tolerance amongst partners	Risk aversion amongst partners
Continuity and consistency of partnership	Lack of data

Identified Themes: Facilitators of Anchor Strategy Implementation

Our analysis of the coded data revealed 6 cross-cutting themes that are responsive to the research questions that guided this study.

Shared values between partners. Health system and community representatives alike described how sharing common missions and values with partners was a significant factor in the ongoing success of their initiatives. For community partners, the opportunity to work with an institution that was clearly focused on the health of local residents – often an implicit if not explicit aim of their own organizations – served as a fundamental platform for relationship-building and trust. For health systems as well, outreach to community partners was typically attributed to their internal culture, emerging priorities, and a history of community commitment. Health systems also spoke of investing time in seeking out organizations that were "truly representative" of community and that reflected perspectives on economic and racial equity that mirrored those of the health system – thereby ensuring that the partnership would provide strategic opportunities for knowledge-sharing rather than being merely transactional. For example, health systems referred to desire to work with community-based organizations that were organizing around policy issues, so that they could also learn the policy concerns of community constituents. As one community partner shared,

"I think that [the health system] is doing an amazing job. We got a chance to visit their food department, and the way that they're thinking about food and their patients is very different. It's from the perspective of a chef, not an administrator. And I know that that's really hard in a world where we're taught to minimize cost. So I can imagine that they're pushing against the

grain and trying to figure it out. Even making changes — putting all that energy into a dining space in a large institution, understanding the value of food and how it plays out in people's lives is huge; it's forward-thinking… most hospitals you go to, that effort to work with small businesses like us isn't necessarily there."

Respondents also cited a shared willingness to invest in multi-level food strategies that go beyond solving immediate food insecurity to focusing on the role of food in individual and community life as a key factor in a successful partnership. The presence of shared values was cited by health systems and community partners alike as a significant facilitating factor particularly in the early stages of an anchor strategy development.

Champions inside the health system. Another facilitating theme articulated by participants was the important role that dedicated individual (or multiple individual) champions within a health system play in realizing the food system initiatives described. Respondents often cited the essential nature of early advocacy by specific individuals, who in many cases had a pre-existing relationship with the community partner. In speaking with some of those health system representatives identified by other respondents as individual champions, they frequently expressed the importance of building a similar commitment to advocacy and the initiative amongst other members of their teams – while acknowledging the risk that can come from building partnerships that are reliant on the specific interest or relationship of a singular individual within an institution.

Executive leadership support from within health system. As a corollary to the role of individual champions, health system and community partners both cited the importance of executive leader support for anchor strategies more broadly, as well as for innovative approaches to implementing those anchor strategies. Executive support was particularly salient given some of the implementation barriers raised, from challenges with scale-up to a still-nascent financial case for engaging in these partnerships. Several respondents stated that choosing to move forward in the face of risk is often presented as a rigid trade-off – for example, in the form of a compliance officer or financial analyst pushing back based on historical precedent and pre-defined protocols. The respondents indicated however, that in actuality forward momentum is simply about a leader or set of leaders choosing to prioritize mission-based activities that benefit community residents, while also holding other priorities such as cost containment or process standards as important, but not top priority.

Partner adaptability and flexibility. Respondents also spoke about the importance of partner adaptability and flexibility in regular business procedures, both on the health system and community partners fronts. This adaptability included health systems' commitment to explaining their often-bureaucratic processes, learning alongside community partners and evolving strategies as necessary, as well as community partners' commitment to considering tweaks to their operating models that could benefit the target community population. One health system respondent explained,

"**…** *One of the things I think we do differently than others is we try to remain flexible. So you've got a small company, and cash flow is important to them, you might need to pay them in 15 days*

versus 45 days. They have to understand the purchase order system. You're going to get a purchase order instead of cash or a credit card or whatever. You have to know how to bill us, you know, all that type of stuff. We have to make sure that vendors that we deal with are qualified from the office of general counsel…so we've got to educate and support. It's probably the most important thing we can do."

Another spoke to the learning mindset that the initiative team adopted:

"I think one of the things that we really wanted to do when we started developing partnerships is to avoid the zero-sum game, so it's to make sure that we're empowering our partners as much as we're empowering our patients. We really try to see if there are any needs that we can help [our partners] fill, if there are any things that we can do better. We have operational partnerships with them obviously, but then we also help get the word out about their services, so it's very bi-directional, I think. We can give them feedback."

Respondents provided several examples of the necessity of flexibility on both sides of the process, and also highlighted that what may seem like a very small change for one partner might be a significant shift for the other. Community partners in particular highlighted the utility of health system flexibility in shifting away from status quo procurement or partnership practices and into new structures.

Risk tolerance among partners. Community partners highlighted that health system willingness to take a chance on a smaller vendor or less-established organization was crucial to

success. In particular, respondents discussed efforts to identify potential risks upfront and attempt to mitigate those as much as possible while also recognizing that in launching new initiatives, new risks would inevitably arise. Both health systems and community partners spoke about "good faith effort" – a mutual understanding that partners were attempting to deliver for patients and shared in the risk of meeting targets and outcomes. Several respondents also spoke about regular check-ins, program improvement cycles, and other mechanisms to ensure that initiatives could evolve.

***"…** As a business, we pride ourselves on—all the fluff around what we're doing is great — but if the core of what we're doing is not good, like if the service is bad or the food isn't good [then it doesn't matter]. The biggest [win] is getting a callback. Like the folks who have placed orders with us at [the health system] have asked us to come back. So that's really important to us, so I would say that that's a win that that feels mutual. Other wins specifically related to those institutions? Just the ability to grow with them… being able to work with institutions that are forward-thinking and are proactive and share our values I think helps drive us as a business in what direction we go."*

Health systems and community partners alike pointed to risk tolerance as a significant facilitator in the success of anchor strategies. Given the nascent nature of most healthcare anchor strategies, respondents emphasized the significant catalyst provided by growth mindset for all partners.

Continuity and consistency of partnership. Finally, community partners cited the importance of healthcare anchors providing a consistent, continuous source of revenue and

partnership that might not otherwise be available to small nonprofits and businesses. In particular, they cited the potential contained within institutional purchasing to "crack open" a business model for a specific community organization – for example, by providing a multi-hospital contract for a particular good or service, and then enabling that over a multi-year contract with flexible terms. As one community respondent shared,

"We spent a lot of time try to figure out how to get into retail, and then found… our business owners have a product that is unfamiliar to a broad audience. [These business owners] don't have any money. And they don't have friends and family with money for the most part, and they aren't able to get it — especially financing for salespeople and marketing… We thought, we can get into Whole Foods, but that's not going to get [the businesses] anywhere. And even getting into 30 or 40 Whole Foods is nothing… it doesn't pay your bills. And so that was why we started looking into the institutional markets.

Financial stability from institutional contracts, often unavailable to organizations that are running on thin margins, emerged for community respondents as an important aspect of addressing the economic stability that can lead to food security. For example, they discussed the importance of year-long contracts to be able to ensure earned income for both food workers and business owners – enabling future projections of income and in turn ensuring that these individuals themselves had enough disposable income to purchase food for their households.

Identified Themes: Barriers to Anchor Strategy Implementation

Respondents also discussed the various barriers that they faced in executing these anchor initiatives as reflected in five themes.

Difficulty scaling initiatives. One of the most common themes raised by both health systems as well as community partners was the issue of scale. While pilot programs or smaller procurement initiatives frequently met their targets, taking the initiative to the entire hospital or health system often met with various challenges from both partners: lack of community partner capacity and lack of operational financing to build up their capacity, the realities of food growing and processing (seasonal changes, the production capacity of local farms), and lack of health system capacity to recruit additional staff, clinics, or hospitals into the program. Community partners often spoke of this as a chicken and egg question: they were eager to scale to the level that the health system needed, but they were not able to access the capital that would enable them to make essential operational infrastructure investments. Health systems, in the meantime, understood these capacity constraints on the part of their community partners, and frequently sought ways to support them in building up capacity – but these methods typically included *pro bono* technical assistance or connections to other community supports, rather than direct operational infrastructure investments from the health system itself. Even where direct capacity-building support was provided, barriers still remained around ensuring that community partners could fulfill health system demand.

Differences in organizational culture and practice. Both health systems and community representatives cited the specific process challenges that come with engaging a health system as a client. In particular, interfacing with health systems involves institutional safety and

compliance standards that may require new training and/or additional effort (investment) on the part of the community partner. As one respondent explained,

"…there's a lot of regulations in healthcare and a lot of compliance respect things. We have to design contracts with our regulations, we have to have what we call KPIs, key performance indicators. We have to have quality measures in anything that's going to the patient or going to impact the patient. You don't have to deal with that in many places. So we have to help [partners] understand at what level they have to perform and what metrics they have to hit….They can't have any big problems and if they've got staff coming in here they have to meet certain requirements – you know, a flu shot, vaccines, criminal background checks."

Respondents also cited challenges with the differences in organizational culture between healthcare institutions and community partners. For example, a focus on targets and metrics (as reflected in the quote above and also discussed in "lack of data" below) that may be typical in a clinical setting – as well as the requisite time, discussion, and paperwork that can come with such tracking—can cause frustration for a community partner more focused on issues of immediate service delivery and business survival.

Limited funding. One of the core value propositions of the healthcare anchor model is the deployment of health systems' economic assets – not merely their external philanthropy or community benefits dollars – to address community-level inequities. However, conversations with interviewees demonstrated that even when cost was not the predominant factor for engaging in a partnership – for example, when executive leadership had emphasized that they wanted to

make a shift towards more sustainable, healthy, and diverse food purchasing – it was still a significant factor that health systems took into account when determining what they were willing to pay or to invest for a service. In several cases, respondents also spoke about the status quo model of health systems operating as pass-through foundations: raising external grant dollars or supporting community partners in raising external grant dollars to help support an anchor initiative that was also funded through purchasing or investment. As one respondent shared,

"I think [one challenge] is also funding to support our efforts. As a non-profit organization, it is extremely hard that we're trying to anchor this [initiative], but it would be a complete disservice if we were to completely have all the expenses fall on our farmers, right, let alone that there are challenges with language barriers, how to run a program like this, how to connect, how to interact with the health systems, or some of the organizers as well too… So we do look to outside grant dollars to enable us to engage in this work.

Another respondent spoke to the challenges that faced for-profit businesses with double bottom lines focused on both profit and mission incentive, that in some cases had even more trouble accessing capital due to existing outside of the philanthropy-nonprofit complex.

"It has been a heroic effort to operate [at that health center]. It doesn't have the right infrastructure. It's tied to our license here, and so it just takes a lot of effort. So if we were to do the same somewhere else—let's just say we opened up a small space at a public market, it would be a night-and-day experience for us, and I don't think that the health center understands that or realizes that. I think that as a for-profit company, a lot of folks aren't looking to us to say, "Hey,

how can we pour money into this initiative?" or realize that we're actually supporting this effort [of addressing inequities] as a business."

While with nonprofits there may be some limited potential for the community partner to receive technical assistance or infrastructure-building support via health system philanthropic support, this was not typically an option available to for-profit businesses that were expected to raise this type of infrastructure capital on their own. For minority-owned businesses, this can prove a significant barrier due to the lack of "friends and family" funding networks as well as obstacles in accessing private bank loans.

Power dynamics. Respondents also brought up the challenges that can come with bridging from the healthcare industry to organizations that may have had previous negative experiences, or who are worried about having limited decision-making and role in the launch of the anchor initiative. Community respondents shared that while their interactions with health systems were generally respectful and collaborative, they were cognizant of the fact that the health system, as the "client" and asset-holder, still had the lion's share of power in the relationship. In particular, community organizations expressed concern about requests to tweak their business practices to be in compliance with health system requirements – which often added additional strain to already stressed organizations. As one respondent shared:

"I think, to be perfectly honest, it's the typical town and gown kind of things that have been issues for decades, for centuries. Trust, building trust… So the question is, when do you make that leap? Have you had those conversations? How do you reach out when there's not a there

there yet, if you want to try and build something from scratch? So I don't really know how to do that yet, but that's fine. I think to be honest, we're early in this journey as far as those meetings…I think the first piece, to be perfectly honest, is getting over the why would they want to talk to us? Getting past that trust piece, if they haven't had a relationship with us before."

Both health systems and community partners expressed awareness of existing power dynamics as a challenge in establishing relationships early on; they also both identified the bulk of the responsibility in addressing this dynamic as belonging to the health system, and that this should take place in the form of acknowledging past traumas as well as developing collaborative decision-making processes.

Risk aversion amongst partners. Just as risk tolerance was a facilitator of success amongst anchor initiative partners, risk aversion was also seen as a prohibiting factor. In particular, this factor arose when taking a particular initiative from the pilot phase into a more institutionalized strategy. Health system and community representatives both spoke to the fact that while they might have interest and mandate within their own teams to move a project forward, in some cases they faced risk aversion from other units of the health system. For example, this pushback often came from the chief financial officer, or the general counsel's office that are structured to mitigate risk wherever possible. Similarly, community partners found themselves risk averse to working with health systems that were requesting an overly niche adjustment or who were going through their own transitions in the form of mergers and acquisitions.

Lack of data. Lastly, respondents raised the issue of data in two contexts. The first was that both the health system and community representatives acknowledged that one barrier to growth for their initiatives was often a lack of impact data such as program effectiveness in the short-term, as well as longer-term community-level health or economic outcomes. This data barrier was also described as a mismatch in expectations between partners in terms of the type of data that mattered the most, how it would be collected, who would collect it, and who would pay for the evaluation.

Identified Themes: Additional Polarities and Aspirations

In addition to the operational barriers and facilitators above, several themes emerged from the analysis that further explore the nature of these partnerships.

Short-term needs versus long-term systems change. Respondents readily acknowledged the tradeoffs inherent in anchor initiatives that are simultaneously trying to address short-term needs such as food insecurity while also attempting to tackle more structural causes such as racial or economic inequity. As one interviewee explained:

"Food, within a true equity framework, isn't a root cause of why people are getting sick. It's that oppression leads to food insecurity. And we're also trying to figure out where we fit into the cycle of intergenerational poverty. I mean, with respect to us in our programming, food is foundational to generational wealth, right, because food insecurity, in and of itself, disrupts your ability to go to work, to go to school, to be effective at both of those places. And both of those things are foundational to your economic mobility, particularly if you're a low-income person,

and then when you start factoring in like medical expenses, that runs counter to being able to thrive, and to accumulating wealth."

However, most respondents highlighted this as a necessary tension and, in many cases, the exact reason that they were engaged in the work – to ensure that patients received what they needed to be healthy while also focusing on community-level efforts to keep that health sustainable.

Multiple, mixed motivators for engaging in anchor partnerships. In our conversations, it was clear that "anchor" serves as an umbrella for a variety of institutional motivations: the desire to buy locally, support community thriving, contribute to environmental sustainability, invest in upstream interventions for patient health, contribute to community economic development, tackle racial inequity via partnerships with diverse leaders and organizations, actualize organizational mission, remain competitive for patient share within a saturated market, and simply engage in the "moral thing to do." As a result, it was often complex to pinpoint exactly how a partnership came to fruition, why it continued to exist, how it was funded, and when success would be achieved.

"[The hospitals], they walk in here and they think we are like the best thing since sliced bread. "That's amazing! We love what you do! We love the stories!" Right? The why they're interested in us can be anything from because they understand that this is who their employees or staff are serving and they need to have some kind of better multicultural offering…sometimes it's about healthy food. In addition to the stuff that we do with our members, we actually have a whole farmer value-added processing program, where we're making food using surplus from local farms. Sometimes it's the ones who are the bean-counters, who are trying to meet their numbers

for diverse spend."

Accordingly, community partners often found themselves attempting to cater to all of these rationales – which could be liberating in some aspects, in that they had only to meet some of the health system's criteria – but also confusing in terms of tracking the latest priority or strategy for the health system.

Optimism regarding the potential for anchor-community partnerships to address food inequities. Despite the very early-stage nature of these anchor partnerships, as well as the barriers surfaced above, the health system and community partners both expressed a significant amount of gratitude and optimism regarding the initiatives in which they were engaged. As one community respondent shared,

"…Overall I would say that the challenges are minimal, I'd say the benefits, the relationship has been tremendous, that every single staff that are part of the [health system], physicians, even on the foundation level here, the corporate level here, that they have been extremely supportive of this, and it's a matter of how do we institutionalize this particular project across all of the clinics of this system. I think that the biggest thing is that what it comes down to in the pilot project here is it's a matter of working out the kinks first, like what works, what are the key assessments that need to be developed out of this, what are some key commitments that we need to have with our patients so that they are on board about this process before expanding this program elsewhere as well too".

5.6 DISCUSSION

The healthcare anchor model is an emerging interest across the United States. At the same time, it is essential to understand how these institutions intersect with community food systems and work to impact the multiple ways in which food impacts health. As part of a larger study examining multiple elements of this phenomenon, this study specifically examined the operational barriers and facilitators that are present within anchor partnerships that focus on the food system. In doing so, it sought to tie together the food systems and health systems literature, as well as add to the field by examining the role of large anchor institutions within community food systems. In general, health system and community stakeholders alike described these partnerships as positive and mission-aligned.

Our results suggest that healthcare anchor partnerships benefit from many of the specific characteristics that healthcare anchor institutions bring to the table: for example, a strong mission focus, risk-tolerance, and adaptability. These traits appear to be particularly important given the early-stage nature of these partnerships and the unique nature of bridging between the clinical, corporate-forward structures of health systems and the social, grassroots-focused orientation of community partners.

At the same time, respondents brought up several structural challenges that anchor partnerships face. In particular, the question of scale and learning orientation raises the question of how health systems might transition from engaging in smaller, one-off anchor initiatives into more robust partnerships and business strategies. As raised by respondents, additional flexibility in practice and policy on the part of health systems, as well as additional learning orientation and support with community partners, may be necessary to scale these efforts within and across health systems.

Further research is needed to assess the nuances of differences in power dynamics and organizational culture. A stated aspiration of healthcare anchor strategies is improving health equity, and additional exploration is required in order to understand the relationship between these two concepts. Furthermore, these results indicate that while there are many factors within the sphere of control for both health systems and community stakeholders, there are also elements of these initiatives that are far more external – for example, the seasonality or precariousness of farming and food production generally.

Strengths and Limitations

This study utilized purposive sampling[123] and interview participants were intentionally selected for their in-depth knowledge of a particular anchor strategy, ensuring direct coverage of the study questions. However, social desirability bias is a possibility, particularly considering that health systems may have sought to depict a positive version of their health equity efforts. Furthermore, a majority of the community partners were identified through health system representatives themselves, indicating that this cohort may have been particularly inclined to positive experiences with their healthcare partners.

5.7 CONCLUSION

This study fills an important gap in the literature about healthcare anchor institutions by providing an in-depth look at how healthcare system – community partnerships are operationalized and implemented in furtherance of the anchor mission. It also seeks to tie together the healthcare and food systems literature and is amongst the first to incorporate feedback from community stakeholders about this phenomenon. These findings demonstrate that

there are clear and identifiable elements that facilitate and hinder anchor strategy implementation, and these findings may shape ongoing practice as health systems consider what they can do to mitigate barriers and ensure that they are adopting facilitative practices.

5.8 ACKNOWLEDGEMENTS

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CHAPTER 6 – MANUSCRIPT 3: Exploring Health Equity as a Component of Healthcare Anchor Strategies to Address Food Systems Inequities[vi]

6.1 ABSTRACT

The concept of the healthcare anchor institution emphasizes the role of health systems as local employers and economic asset-holders with the opportunity to invest in community solutions that address not just short-term needs (i.e. an individual patient's food insecurity) but also long-term determinants of poor health (i.e. supporting diverse food vendors who in turn generate well-paying jobs in neighborhoods where unemployment is a key driver of poor health).[124] One rationale put forth by self-identified healthcare anchors for pursuing these strategies is a desire to address health inequities.[125] As health systems increasingly move to address social determinants of health, there is growing conversation regarding their mandate to invest in solutions that address not just social determinants of health but also structural determinants of health inequity – factors such as structural racism and poverty.[126] The Institute for Healthcare Improvement's Pathways to Population Health highlighted anchor initiatives as essential to addressing these structural determinants and improving health equity.[127]

However, there has been little exploration to date of how health equity as a principle is explicitly incorporated into the genesis, design, and execution of anchor strategies.[128] In-depth, key informant interviews were conducted with health system and community representatives across seven anchor initiatives specifically focused on food systems, as food is a common determinant of health addressed by health systems. While health equity was nearly universally held up as a north star by participants, definitions, expectations, decision-making structures, and

[vi] This paper is targeted for submission in the Journal of Public Health Management Practice as a Practice Full Report. The word limit is 3500 words.

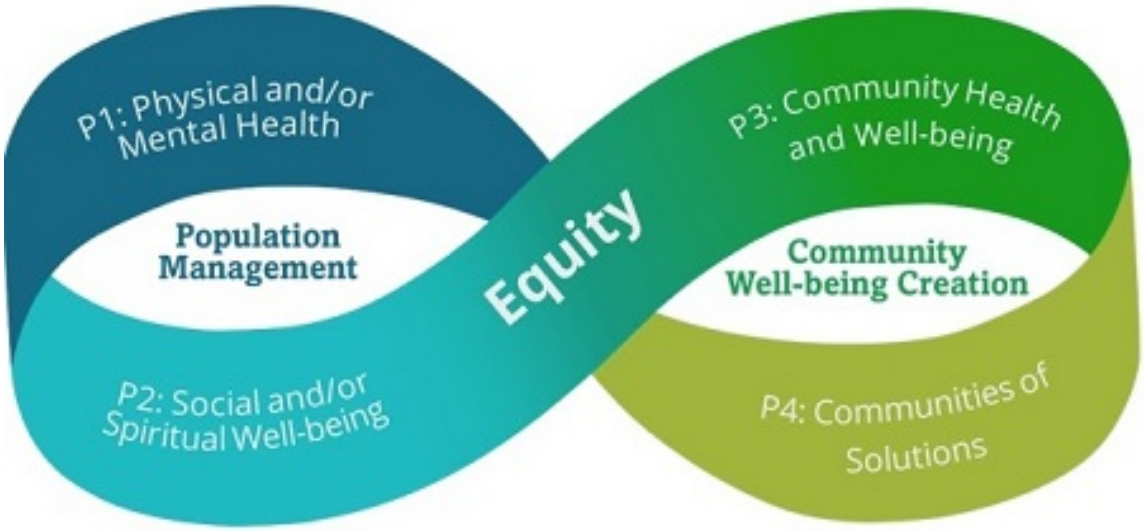
other program components intersecting with health equity were highly variable. However, capturing best practices and lesson learned from participants may prove useful for field practitioners, particularly given the very recent ascendancy of the healthcare anchor framework, and the ongoing national dialogue regarding strategies to tackle health inequities.

6.2 INTRODUCTION

The World Health Organization's (WHO) discussion of health equity states that "to be effective and sustainable, interventions that aim to redress inequities must typically go beyond remedying a particular health inequality and also help empower the group in question through systemic changes, such as law reform or changes in economic or social relationships."[129] As health systems in the United States are incentivized by health reform and other industry forces to engage in efforts that improve health equity, the question of whether their actions move beyond addressing inequities and into the social or economic empowerment called for by WHO remains largely unexplored.[130] One specific framework intersecting with the pursuit of health equity is the "healthcare anchor" model, where health systems leverage their long-term, place-based economic power to address determinants of health. This may occur, for example, by shifting a percentage of their food procurement practices to diverse, local vendors who generate jobs in neighborhoods where high unemployment is both a historical legacy as well as a key driver of poor health outcomes. A previous study found that self-identified healthcare anchor institutions stated that a primary motivator for engaging in anchor strategy implementation was to explicitly address health equity. Importantly, they expressed that anchor strategies were particularly well-positioned to address structural factors such as racial and economic inequity, compared to other social determinants of health interventions.[131]

The Institute for Healthcare Improvement's Pathways to Population Health Framework established a conceptual framework in 2019 to understand how healthcare institutions can contribute to health equity at various levels ranging from individual patient need to integrated solutions for community-level well-being (see Figure 1). The framework synthesizes existing literature that examines the US healthcare system's move from a previous focus on episodic, non-integrated care (1.0), to now outcome-accountable care (2.0), and in the future towards a community-integrated healthcare system (3.0). The framework contains four pillars, and the fourth – referring to "communities of solutions"-- explicitly identifies the healthcare anchor model as a strategy for improving health equity, stating that it has "great potential to substantially increase healthcare's impact on local economies and social drivers of health and well-being."

Figure 1 (Figure 11): Institute for Healthcare Improvement Health Equity Framework[132]



Despite this alignment, there has been limited published research exploring whether these anchor strategies improve health equity as per the WHO's definition of supporting social and economic empowerment. As anchor initiatives are implemented, do they simply mirror the same power dynamics and challenges that other hospital-community collaborations face? While health systems acknowledge community engagement as an effective strategy for activating patients typically marginalized from decision-making processes,[133] and community-based participatory research is understood as an effective bridge between science and practice,[134] discussion of patient involvement in health or social determinant-related interventions – particularly in the U.S.-- is still frequently viewed through a clinical or health outcomes-specific lens.[135] For example, a program focused on teaching healthy eating behaviors to patients at risk of cardiovascular disease may engage patients in identifying what aspects of chronic disease education would be useful to them – but may not create opportunities for participants to discuss the systems and policies that created the local food environment, nor engage them in developing solutions to address these structural conditions. In assessing the current landscape of healthcare anchor activities, including those that impact the local food ecosystem, it is important to understand the extent to which health equity and other related concepts such as collaborative governance and shared decision-making are reflected in health systems' planning and implementation associated with anchor activities. Here those needs are addressed by answering the following research questions: (1) How do health system and their community partner engaged in food systems-related anchor activities define health equity for those activities; and (2) What considerations do health systems and community partners raise with respect to incorporating health equity as a guiding principle in anchor strategy design, implementation, and evaluation?

6.3 METHODS

The results reported herein are part of a larger study of healthcare anchor institutions that includes a survey of Healthcare Anchor Network members – health systems who self-identify as healthcare anchors – and an analysis of in-depth key informant interviews to further explore anchor strategy trends and motivators, with a specific focus on food system-related determinants. In-depth key informant interviews were analyzed to explore the definition and role of health equity within food system-related anchor strategies.

Sample

To identify healthcare anchor institutions focused on food systems interventions, a starting point of the 42 health systems who were members of the Healthcare Anchor Network (the Network) as of September 2019 was identified. The list of existing members was assembled from an internal list maintained by staff from The Democracy Collaborative. From this list, there was a purposive sample selected of health systems who were known to staff at The Democracy Collaborative to be engaging in anchor strategies that involved partnerships with community members. This sampling method was not representative – rather it was designed to ensure that the participants who were selected could provide a robust and nuanced perspective into anchor strategy implementation and the concept of health equity specifically.

With input from The Democracy Collaborative staff, five anchor health systems were identified that focus on food and reached out to the designated "lead contact" for each health system. The lead contact was typically an executive sponsor or project manager responsible for insight into anchor strategies taking place across a system. Each lead contact was sent an email

invitation to participate in the study as a key informant interviewee. Snowball sampling[136] was utilized to identify additional staff within each health system, as well as community partner representatives engaged in the anchor strategy initiative.

Coding and Analysis

The interviews were conducted by the primary researcher (S. Sarkar). Two interview guides – one for healthcare representatives and one for community representatives – were developed based on the survey findings, existing literature regarding anchor strategies and food systems, and the study aims. The interview questions focused on the genesis and structure of the anchor strategy, how it intersected with food systems, how the respondent defined health equity generally, and how they perceived their initiative to incorporate aspects of health equity or reflect equity principles themselves (Table 1). All interviews except for two took place in-person at the healthcare institution or community organization of the interviewee; the remaining interviews took place via video conference call. Video calls were conducted due to preemptive researcher caution regarding air travel at the end of February, in light of the emergence of COVID-19. All interviews took place between January 15th, 2020 and February 28th, 2020.

Table 1 (Table 10): Interview Guide for Healthcare and Community Representatives

Introductory Questions	*Can you state your name?*
	What is your organization and role at that organization?
	Can you describe [insert anchor food systems initiative here]?
	What is your specific involvement in the initiative?
Anchor Initiative Details - General	*How did the initiative start?*
	Who are the stakeholders involved in the initiative?
	What is the governance structure for this initiative?

	How is the initiative funded?
	Tell me about the intended goals and outcomes for the initiative.
Reflections on Health Equity	*How would you define health equity for yourself? For the initiative?*
	What aspects of the initiative do you feel are equitable?
	What aspects of the initiative could be more equitable?
	How does the initiative specifically engage or involve its intended end-users? What about community partners in general?
	How does governance structure influence input, feedback, and decision-making throughout the initiative?
	How was the need for this particular solution identified?
	What are the challenges in building an equitable initiative?
Conclusions	*Is there anything else you would like to tell me about this initiative?*
	Is there anyone else I should talk to in order to understand the initiative?

Interviews were transcribed by a professional transcription service and coded. An *a priori* codebook was developed by the primary researcher based on concepts from the background literature, the elements of the questions included in the interview guide, and practitioner knowledge of the presence of health equity within healthcare anchor strategies. This initial codebook was applied to all transcripts and revised based on emerging concepts from the texts and identification of areas for further definitional clarity. Subsequently, the revised codebook was applied to a subset of transcripts for further iterative process related to reading and coding – enabling further refinement of existing codes and the addition of new coding categories. To ensure accuracy, a second coder was trained on the codebook. The second coder applied the codebook to a subset of transcripts and noted any areas of potential revision, addition, or elimination of codes. The primary researcher and second coder then compared coding segments and made joint revisions to the codebook. This final codebook was then developed and applied to

all transcripts using MAXQDA qualitative data analysis and research software. Key themes and representative quotes were identified by utilizing a content analysis approach. All data was de-identified to ensure participants' confidentiality.

6.4 RESULTS

In total, twenty interviews were conducted, including twelve health system representatives, spanning from frontline staff to executives, as well as eight community partner representatives. Seven distinct anchor strategies focused on the relationship between health systems and food systems were identified; operational characteristics of these initiatives, as well as barriers and facilitating factors, have been discussed in [Paper 2 (see Chapter 5 above)]. Given the economic focus of anchor strategies, community-based partners were not exclusively nonprofit organizations or service organizations as seen with traditional hospital-community partnerships: 3 out of 7 community partners were in formal vendor contract relationships with their health system counterparts.

Table 3 (Table 11): Anchor Initiative Decision-Making and Governance Characteristics

Initiative Description	**End-User Population(s)**	**Reason for Launch**	**Community Engagement**	**Governance Structure**
Urban farm program providing free produce and nutritional education	Patients experiencing food insecurity in target neighborhoods surrounding hospital; minority communities	Feedback from patient population regarding food insecurity	Community members participate in urban farm and are regularly surveyed regarding their satisfaction with services	Steering committee consisting of health system, community organizations including one faith-based organization

	experiencing health inequities			
Community-Supported Agriculture program for vulnerable clinic patients via local minority farmers association engaged in community wealth-building[137] activities	Patients experiencing food insecurity in target neighborhoods surrounding hospital; minority communities experiencing health inequities	Identification of food insecurity as a community-level need through the health system's Community Health Needs Assessment	Limited engagement of program, participants to determine satisfaction with the program	Frequent check-in conversations between health system staff and community-based organization; no formal governing body
Regional, worker-owned food production center providing healthy, locally-sourced meals to area health systems	Local communities facing severe unemployment, health system patients receiving in-hospital meals	Community dialogues between a diverse set of local stakeholders and health systems concerning regional food systems, wealth creation, environmental sustainability, and healthy food purchasing	Intensive, multi-modal approach to ensuring community buy-in and ownership of initiative; concentric circle model to ensure ongoing feedback from various community stakeholders	Large governance council including food justice organizations, local activists, health system representatives
Procurement contracts with minority woman-owned business to supply specific products for patient meals	Local food businesses, particularly those with historically underrepresented ownership	Health system mandate to shift towards a more local, diverse procurement spend	Limited engagement of end-users by health system, but community partner collects ongoing feedback from target neighborhoods	Frequent check-in conversations between health system staff and community-based organization; no formal governing body

Mobile market providing subsidized produce from local farms with sustainable practices	Patients experiencing food insecurity in target neighborhoods surrounding hospital; minority communities experiencing health inequities	Identification of food insecurity as a community-level need through the health system's Community Health Needs Assessment	Limited engagement of program, participants to determine satisfaction with the program	Frequent check-in conversations between health system staff and community-based organization; no formal governing body
Food business incubator providing support to diverse vendors in accessing institutional contracts	Local food businesses, particularly those with historically underrepresented ownership	Community identification of an infrastructure gap for small food vendors (many from immigrant communities) in need of equipment and infrastructure	Ongoing engagement with client food vendors to understand their needs and providing evolving technical assistance	Frequent check-in conversations between health system staff and community-based organization; no formal governing body
Mobile market and culturally-competent food celebration activities to community stakeholders in target neighborhoods	Patients experiencing food insecurity in target neighborhoods surrounding hospital; minority communities experiencing health inequities	Identification of food insecurity as a health system priority; community conversations by health system to identify community partners that were "truly representative"	Limited engagement of end-users by health system, but community partner collects ongoing feedback from target neighborhoods	Frequent check-in conversations between health system staff and community-based organization; no formal governing body

Respondents described anchor initiatives that varied widely in their genesis, design, and implementation. Notably, despite most respondents identifying health equity as a core principle

of their work, only two initiatives had formal governance structures in place that outlined a shared approach to decision-making between health system and community stakeholders.

Key Themes

The second portion of our results is organized by the key themes identified through the analysis. These themes fall into three categories: (1) disparate definitions of health equity; (2) process versus outcome approaches to health equity; (3) views on accountability and short versus long-term impact.

Disparate and evolving definitions of health equity. Respondents offered varied definitions of health equity, how they understood their initiative incorporated principles related to health equity, and where they thought there was room to make initiative practices and processes more equitable. These definitions often reflected disparate institutional contexts: for example, health system representatives frequently defined health equity as the absence of health disparities, whereas community representatives typically centered on issues related to power and oppression. As one community participant shared,

"Yeah, [health] equity is tough. I feel like it's a little bit of an esoteric concept, there's a lot of different definitions of what health equity means and I feel like it's been whitewashed a little bit, definitely oversimplified… it's become like a buzzword… Healthcare kind of gets it. They're coming around to the idea that, okay, there's structural barriers that are getting people sick. This idea that at the highest levels of our government and our society, there's institutionalized racism

and systematic economic oppression that runs along the lines of gender, race, class, sexual orientation."

Accordingly, healthcare representatives acknowledged that their definitions of health equity, which had previously focused on access or service provision, were continuing to evolve and change based on conversations with community stakeholders. One health system respondent explained the internal trajectory within their own institution:

"We've been having a lot of conversations about health equity recently, and for me and the work that I am leading I feel like the access [to healthy food] is a huge piece for… the community members that we serve. There's definitely a disparity amongst people and even the way that they're treated as well, and that's a challenge that I think we have not necessarily figured out how to tackle at all, and I think our opportunity is to-- we don't really have a system approach to how we approach health equity, and so we try to do the best that we can wherever we're at. But I think it needs to be a broader approach."

Respondents also spoke to the value of establishing clear expectations up front, treating equity and empowerment as elements of program design that were equally important as financing and staffing. They also stressed the importance of both defining key stakeholders – patients, community-based organizations, clinic staff, etc. – as well as building regular mechanisms for collecting meaningful feedback from those stakeholders on an ongoing basis.

Process versus outcome approaches to health equity. Healthcare and community representatives alike acknowledged the challenges of incorporating health equity as a principle not just in program goals but also throughout initiative design and implementation. Respondents shared that they found anchor strategies to be "generally equitable" in nature given their willingness to focus on issues directly related to the socioeconomic position of individuals or communities. For example, engaging partners dedicated to livable wages, fair hiring practices, and entrepreneurship/workforce skills development are aimed at structural change. But they also highlighted areas for additional integration of equitable practice, including the creation of more forums to incorporate community voice and representation, consideration of operating/capacity-building support to community-based organizations, engagement in policy/advocacy work targeting specific structural determinants, and integration of program end-users into evaluation and data efforts.

Views on accountability and short versus long-term impact. Several respondents raised questions about institutional responsibility, reach, and role. Health systems and community organizations alike wondered how "comprehensively" they were expected to focus their efforts related to health equity. As one community representative explained,

"I think equity work within an organization happens on a couple different levels. For example, us making the choice for a $42,000 minimum starting salary and thinking about how we start creating wealth for our employees that are otherwise marginalized within economic systems... Committing ourselves to hiring individuals that are otherwise excluded from the workforce and

trying to counter some of those forces that get a resume to our desk, trying to counter some of that implicit bias that I possess, that we possess as an organization or in society."

Respondents also described how these questions about accountability influenced governance and decision-making. For example, considering what perspectives needed to be reflected on a steering committee or governance council, or making tradeoffs based on timeline (i.e. choosing to focus on partnering with a community-based organization with a proven track record and ability to absorb financing, versus a smaller grassroots entity.)

6.5 IMPLICATIONS FOR POLICY AND PRACTICE[vii]

- Establishing a shared definition of health equity between anchor institutions and their community partners – as well as remaining open to revisiting that definition throughout the evolution of an initiative – deepens trust, supports partner adaptability, and spurs creative program innovations that may better serve patient/community needs.
- Incorporating health equity into anchor strategies has implications for every stage of program development: the initial needs assessment and community dialogue to determine the need for a particular strategy; initiative design; implementation and growth; and evaluation. Different tools and mechanisms should be deployed for each of these stages.
- While anchor strategies and the healthcare institutions that implement them are more conceptually aligned with the concept of addressing determinants of health inequity such as structural racism or economic disinvestment, this theoretical commitment must be

[vii] This section and formatting is required by the Journal for Public Health Management and Practice for articles submitted in the "Practice Full Report" category. Guidelines state: "Bulleted format, 100-200 words max." Implications may address relevance to the development, adoption, implementation, or evaluation of public health policy or the practice of implementing such public health policies or practices in "real world" settings."

undergirded by practices, policies, and process that also acknowledge those determinants. Developing those practices requires close partnership with diverse community stakeholders to ensure customization and responsiveness.

- Practitioners looking to implement anchor strategies or engage with anchor institutions should consider what governance structures and decision-making models will enable them to most effectively achieve their goals, including goals around health equity. Additional case studies and research on these models is needed to advance the field.

6.6 DISCUSSION

The role of healthcare anchors in establishing community partnerships to improve health equity is an issue of increasing national prominence. This study builds upon previous research examining barriers and facilitators with respect to the implementation of healthcare anchor strategies, including power dynamics and differing institutional norms. It also addresses a significant gap in the literature regarding the intersection of health equity concepts with the healthcare anchor model, providing a unique perspective on the positioning of health equity within interventions that have been explicitly identified by health systems as addressing economic and structural determinants of health. This study also seeks to answer this question via community partner perspectives, who remain underrepresented in the literature on healthcare anchor and determinant of health initiatives.

Study Strengths and Limitations

Selection was purposive and interview participants were intentionally selected for their in-depth knowledge of a particular anchor strategy, ensuring direct coverage of the study

questions. However, social desirability bias is a possibility, particularly considering that health systems may have sought to depict a positive version of their health equity efforts. Furthermore, a majority of the community partners were identified through health system representatives themselves, indicating that this cohort may have been particularly inclined to positive experiences with their healthcare partners.

Results

The findings demonstrate that stakeholders involved in implementing healthcare anchor strategies to address inequities in the food system universally acknowledged that health equity was a core goal and motivator for pursuing a particular strategy. However, definitions of health equity, and perspectives on how it should be incorporated into program design and practice varied widely. Some of this variation can likely be attributed to the different perspectives and priorities represented by the distinct roles and fields represented by the respondents, but one key theme that also frequently arose was the multi-layered nature of addressing the structural and social determinants of health equity. As a result, determining how to fully encompass the concept of health equity within an anchor initiative frequently arose as a challenge with multiple pathways to pursue.

While previous studies examining health equity within hospital-community partnerships have identified similar barriers, this study asks the specific question of whether health systems that have pledged to address economic and health disparities in their role as anchor institutions have a particular approach to health equity. Participant responses indicated that health systems identifying as healthcare anchors have in some cases already explicitly identified health equity as a core design principle of their work and considered governance structures accordingly,

indicating that the healthcare anchor frame may provide an explicit entry point for tackling multiple aspects of health equity. These findings also suggest that healthcare anchors and their community partner may benefit from (1) explicitly defining what health equity means for their initiative; (2) mapping out how that definition will be translated into practice along the various stages of implementation, from design to service delivery to quality improvement; (3) establishing clear governance structures and decision-making processes that enable ongoing calibration of the multiple aims –including equity— of an initiative.

6.7 ACKNOWLEDGEMENTS

This study was supported by a student research grant from the Johns Hopkins Bloomberg School of Public Health Center for a Livable Future. The authors also thank the Healthcare Anchor Network at The Democracy Collaborative and each of the health system and community partners that participated in the interviews.

CHAPTER 7: DISCUSSION

7.1 Integrated Findings

This research sought to investigate and capture how the healthcare anchor model is being adopted by health systems and what that means for the implementation of healthcare anchor strategies within community settings. The findings reflect multiple methods and stakeholder perspectives and raise important insights regarding the current institutionalization of anchor practices, the challenges and opportunities that face health systems and community partners in launching and sustaining these practices, and the link between anchor strategies and health equity-focused process and outcomes. Key themes from each of the three manuscripts are summarized and also integrated below.

7.1.1 Manuscript 1: Assessing Health System Adoption of Healthcare Anchor Strategies

Manuscript 1 provides an initial descriptive assessment of how health systems within the Healthcare Anchor Network are adopting the healthcare anchor model at the institutional level. Findings from this study indicate that health systems within the Network of varying size, revenue, and type are implementing anchor strategies. With half of respondents identifying that they had adopted an institution-wide "anchor mission" and nearly half of respondents indicating that their executive leadership was very engaged or fully committed to healthcare anchor strategies, this framework appears to have resonance as an institution-wide framework, rather than an isolated set of activities. In determining how the healthcare anchor model concept aligns with existing approaches to addressing health determinants, this level of adoption indicates that there may be a unifying or aligning impact: health systems utilize the frame of "anchor" to create

an overarching strategic umbrella for efforts that leverage institutional assets towards upstream interventions.

At the same time, the results point to the quite nascent nature of the healthcare anchor model. While nearly all health systems identified that they had implemented some process changes (for example, instituting a place-based investment program), very few categorized their efforts as "fully institutionalized and resourced" – implying that many of these efforts are still in the pilot phase or occupy a small percentage of the potential operations within a particular business unit. There appears to be significant room for deepening and broadening anchor strategies within health systems, whether by ensuring that existing programs have greater community impact; launching new anchor strategies in other business units or ensuring that there is a clear governance and decision-making structure for anchor programming within the health system.

Finally, the findings demonstrate that there are a variety of motivators driving health systems to adopt the healthcare anchor model. These include both business-related motivators such as cost management and market share, as well as mission-related motivators such as a desire to address community-level economic inequities. This finding, along with health system respondents' indication that they preferred utilizing healthcare anchor language and strategy over traditional population health/community benefit language and frameworks, indicates that there is an opportunity to further explore how the healthcare anchor model both encompasses, accelerates, and transforms health systems' work to address structural determinants of health.

7.1.2 Manuscript 2: Analysis of Blocking and Facilitating Factors in Implementing Healthcare Anchor Strategies to Address Food Systems Inequities

The survey utilized in Manuscript 1 highlighted several types of anchor strategies currently being implemented by healthcare anchor institutions, and also identified key motivating factors for engaging in those strategies. However, Manuscript 1 did not delve into questions regarding the actual details of these anchor strategies, nor the challenges and opportunities presented by them. Manuscript 2 sought to further understanding of anchor strategies through qualitative interviews with health systems as well as community stakeholders (whose perspective was not addressed in Manuscript 1). Findings from this study indicate that key facilitating factors for healthcare anchor strategy implementation relate to organizational mission and mandate – health systems and community stakeholders alike pointed to importance of shared goals around improving community health outcomes. Within health systems, these goals often also came with executive leader championship that enabled early-stage or unconventional programming to move forward. Additionally, stakeholders highlighted the consistency and risk tolerance of anchor partnerships related to other business interactions or collaborations between health systems and community partners, implying that these initiatives may adopt a more learning-oriented, co-creative approach that supports ongoing partnership.

Stakeholders also identified several barriers to implementing anchor strategies. The most significant of these related to scale: health systems and community stakeholders both acknowledged that anchor strategies in many cases came with volume constraints and required distinct methodology from standard modes of health system practice. For example, for a health system to move even 5% of their food purchasing practices towards minority or women-owned businesses in neighborhoods with high levels of unemployment and high health inequities, several steps are required. The first might include identification of potential vendors and then ensuring those vendors had access to technical assistance and capacity-building support essential

for ensuring compliance with highly technical healthcare industry standards. Next, a health system and local food producer would need to establish a relationship, build trust, and identify a feasible starting point for collaboration. These discussions might include the fact that a health system's actual purchasing need is greater than what the food producer has available, leading to a plan to start with a smaller percentage and then work upwards. Next, over the duration of the partnership, constant data and communication is needed in order to calibrate between demand and supply; the community partner may also need to shift their own business model or make accommodations based on the preference of the health system customer. By contrast, a health system's traditional food procurement practice may simply require a singular step of operating through a Group Purchasing Organization that provides easy-access purchasing of goods but does not contribute to the local economy in any way. This theme indicates that major considerations for healthcare anchor institutions are (1) how fully they desire and are capable of leveraging their economic assets differently; (2) additional supports (provided either by the health system itself or other entities) to ensure that community partners have the operational support and capital to successfully meet demand; (3) internal cultural, practice, and policy changes necessary to move anchor initiatives from "pilots" to a new normal.

One key feature of this manuscript was its focus on community stakeholders, whose perspectives are frequently left out of the literature surrounding anchor institutions. Community stakeholders acknowledged that there were challenges in engaging with health systems, particularly related to differences in cultural norms, expectations, and power dynamics. This raises the question of whether the onus of "adaptability" should be on the relatively well-resourced health systems or their community counterparts, who in many instances have limited infrastructure due to the very economic conditions that the health systems are interested in

addressing. For example, several community partners raised the tradeoff between ensuring that products are locally and sustainably grown –often in smaller amounts--, and the large procurement needs of a health system. However, several community partners expressed interest in and strategies for growing their operations to meet health system demand – but highlighted that it can be challenging for their businesses to access essential operating capital, whether due to structural racism, lack of community investment opportunities, or capacity. This finding raises the question of whether health systems should consider their partnership role not only from the perspective as a "buyer" of services, but also as investing in the community infrastructure to ensure those services can be delivered in a way that strengthens both the health system as well as the service provider. This concept – that health systems might play a role in community capacity-building that is more broadly focused than just a specific pilot or program – was frequently referenced by community respondents but rarely by health system respondents, indicating a potential area for additional exploration.

Despite stated challenges, community respondents universally referred to their interactions with health systems as positive experiences that made strategic sense for them given their missions and operations, which often focused on community empowerment and wealth-building in addition to health improvement.

7.1.3 Manuscript 3: *Defining Health Equity as a Component of Healthcare Anchor Strategies to Address Food Systems Inequities*

Manuscript 3 examined the role of health equity as a principle of healthcare anchor strategies focused on food systems. This manuscript was intended to provide deeper insight into a finding surfaced in Manuscript 1that a key motivator for health systems in adopting the

healthcare anchor model was to improve health equity; it also built upon themes that arose in Manuscript 2 pertaining to power dynamics and cultural differences between health systems and community partners. Three key findings emerged. The first was that health systems and community partners expressed varying definitions of health equity, both within their institutions as well as with respect to the specific anchor strategy at hand. Given the broad, multi-layered nature of health equity – spanning across both macro and micro-level factors, respondents shared that they often were challenged to define exactly what comprised health equity, which in turn made it difficult to visualize how health equity might be used as a guiding principle or aim for anchor work. This general challenge also intersected with the variability between healthcare and community approaches, with the former generally focusing on service delivery and the latter focusing on even more upstream factors such as power-building.

The second theme related to the differences between addressing health equity in terms of program outcomes versus as a part of process. For example, health systems might consider an initiative "equitable" due to its focus on socioeconomic factors such as employment. But community respondents in particular raised the importance of incorporating equity into needs assessment, solution development, and implementation as well -- whether through tailored governance structures or iterative dialogue amongst stakeholders. The third theme that emerged related to role and accountability: acknowledging that "equity" could be improved on multiple levels, health system and community respondents alike highlighted several areas where they hoped to improve practice but were unsure if it is was within the scope of their responsibility (i.e. not just hiring from local neighborhoods but hiring the most marginalized from within those neighborhoods). These findings indicate that a conceptual framework that more comprehensively

defines how health equity and healthcare anchor strategies intersect would be valuable to the field.

Integrated Discussion

Across all three manuscripts, one recurring theme was the importance of addressing economic determinants of health. Health systems and community partners alike acknowledged that one of the strengths of the healthcare anchor model is that, at the very least, it provides stakeholders with an economic framework through which to view health. This takes place at several levels: at the individual patient level, where health systems consider interventions that will directly improve patient socioeconomic status or opportunity; at the institutional level, as health systems determine how they can leverage their full suite of economic assets, not just philanthropic or community benefits funds; and at the community level, as both health systems and community partners consider what types of partnerships will lead to longer-term economic prosperity for whole neighborhoods or target regions. At a time when general consciousness surrounding the causes and impacts of wealth inequality appears to be expanding,[138] this was held up as a positive characteristic of a healthcare anchor approach.

At the same time, both health systems and community respondents raised the experimental nature of healthcare anchor strategies, pointing to the very early-stage nature of this work and also highlighting it as a new tool in a broader suite of approaches to tackle health disparities. A related question that particularly emerged from the results of the second and third manuscript pertains to the role of health systems in addressing structural determinants of health. While respondents spoke of their work to improve community economic security, address food security, and invest locally, some also raised that they were uncertain whether these were gaps.

Due to the specific research aims, there was limited discussion of the role of government versus the role of private, typically nonprofit institutions in addressing complex community-level trends that are often subject to societal and political forces.

Overall, all three manuscripts pointed to the perceived value of the healthcare anchor model. In Manuscript 1, health systems indicated that they view the model was valuable enough to create high-level institutional buy-in. In Manuscript 2, community respondents spoke to the advantages of working with health systems on various partnerships, and in Manuscript 3, both health systems and community respondents shared their perspectives on how healthcare anchor strategies could contribute to strengthening health equity.

7.2 Research Limitations and Strengths

All research contains limitations, and that is true for this undertaking. In terms of limitations, all three manuscripts rely on institutional contacts identified through the Healthcare Anchor Network. The Network contains health system members who self-identify as healthcare anchors and also pay a membership fee to participate. As a result, social desirability bias may have been present in both the results arising from the electronic survey as well as the health system and community partner interview. Non-response bias is also a possibility in Manuscript 1, as not all health systems who received the survey completed it. While a comparison of respondents and non-respondents yielded few significant differences in terms of type of health system, duration of membership in the Healthcare Anchor Network, or geography, the respondent population is also not representative of the general Network population.

The interviews in Manuscripts 2 and 3 were primarily sourced through lead contacts identified through the Healthcare Anchor Network, which resulted in limited perspectives:

participants engaged in anchor strategies who were not members of the Network could also have been included in the sample. This is particularly important in considering the community partner perspectives: although interviews were conducted separately and confidentially to encourage authentic feedback, the fact that these interviews were arranged through health systems that often hold financial power over their community partners whether as funders, financers, or otherwise, raises the prospect of social desirability bias.

Another research limitation was the author (S. Sarkar)'s conflict of interest. As discussed in Chapter 3, during the course of this research the author was an independent contractor to the Healthcare Anchor Network. Informed by that experience, she held pre-formed biases and perspectives on the healthcare anchor model. Efforts to mitigate this limitation were addressed through the various quality assurance measures described in Chapter 3. However, this relationship with the Healthcare Anchor Network and its members also contributed to research strength. Over the past two years, the author developed significant personal knowledge of this subject area through monthly calls with health systems looking for guidance on their community collaborations; attendance at several in-person convenings with multiple stakeholders from each member health system; and regular conversations with Network staff to assess broader healthcare anchor trends across the industry. This role also aided in survey administration and interview recruitment – through the author's personal relationship with several of the respondents, she was able to build an atmosphere of trust and ensure high responsiveness via regular communication. Within an interpretivist framework, the researcher's perspective is to be noted and utilized in iterative analysis, which the author ensured in the form of ongoing voice memos, the use of external reviewers for qualitative analysis, and explicit acknowledgement of my background.

Another study strength was the ease of document analysis, enabled by readily available third-party reports on the healthcare anchor phenomenon. The Healthcare Anchor Network's toolkits and playbooks, as well as content from The Robert Wood Johnson foundation, were free to access and quickly identifiable, which in turn led to early-stage data analysis, a key component of effective qualitative research.[139] This analysis, which spanned documents over a roughly 10-year span, also allowed the tracking of the evolution of the healthcare anchor model over time, and to note these shifts for further exploration in the subsequent research methods.

Assessing the role of health systems as anchor institutions is a relatively new field of study, and the research in this manuscript represents the first of its kind in this area. As a result, research methods were selected for their ability to ensure a broad, descriptive, and foundational approach. The combination of document analysis, along with the interviews, enables a rich portrait of the current reality of healthcare anchor strategies and their implications.

7.3 Practice Implications and Recommendations

Several practice and policy implications emerge from the findings within the three manuscripts. The following recommendations, grouped by stakeholder category, present opportunities for those focused on social and structural determinants of health to consider leveraging the healthcare anchor model and its component parts.

Health System Practitioners

The findings point to several actions that health systems can take to initiate or deepen their healthcare anchor practice. The first is to consider the intentional articulation of the anchor mission as a core aspect of organizational strategy – and then to dedicate resources and planning

energy towards it accordingly. The anchor concept, and it's focus on leveraging all of the assets a health system possesses in way that directly address community-level inequities, has significant potential to transform the role that health systems play within the local economy – but as with any organizational initiative, impact can be strengthened by structure and intentionality or diluted by internal silos and decentralization. This is particularly true given the multiple motivators driving health systems to consider healthcare anchor strategies, as discussed in Manuscript 1. Health system leaders looking to adopt a healthcare anchor approach should develop plans for creating institutional buy-in at multiple levels, including board of directors, executive leadership, business units, and frontline staff. Several health systems have adopted governance mechanisms in the form of an internal anchor steering committee or a revised organizational structure that includes staff specifically responsible for the anchor strategy execution. These structures also help ensure that other health system activities, including community benefits planning, more clinically-focused population health strategies, and hospital grant-giving, are internally aligned with healthcare anchor strategies.

Fortunately, the field has continued to surface best practices for deepening institutional adoption, as well learning communities for health systems to share those practices with one another. Health systems looking to adopt an anchor mission and implement anchor strategies have several tools at their disposal to ensure internal buy-in as well as successful implementation. These include detailed technical assistance material such as those developed by members of the Healthcare Anchor Network. For example, Rush University Medical Center and ProMedica, in partnership with The Democracy Collaborative, have developed comprehensive "anchor playbooks" that outline their approach to developing and implementing an overarching healthcare anchor framework within their institutions. The Network has also developed specific

toolkits focused on strategies for place-based investment, inclusive, local hiring, and inclusive local purchasing – identifying hundreds of cases and related activities that health systems are currently adopting. In addition to the Network, initiatives such as Health Care Without Harm's Anchors in Resilient Communities and Healthy Food Playbook, and professional hospital associations such as America's Essential Hospitals and the Catholic Hospital Association, are also providing forums for discussion of healthcare anchor practices as well as surfacing additional case studies that provide insights for how to approach this work.

Another area for practice improvement with respect to anchor strategies is community collaboration. As discussed in Manuscripts 2 and 3, anchor work is bi-directional: to ensure maximum impact and effectiveness in addressing community need, health systems should consider adopting co-creative and equitable approaches with their community partners. Several resources exist for healthcare institutions seeking to deepen their community engagement practices, from IHI's Pathways to Population Health, to the Community Activation Series from ReThink Health, an initiative of the Rippel Foundation focused on building distributed leadership models between healthcare entities and community entities. Existing frameworks such as Sherry Arnstein's Ladder of Citizen Participation, which distinguishes between citizen 'tokenism' where constituents are engaged but do not have a meaningful partnership stake, and citizen 'control', which includes shared decision-making, as a baseline from which to think about hospital-community interaction as well. The Healthcare Anchor Network's Community Engagement Matrix (see Figure 12 below), for example, developed by current healthcare anchor members, outlines five proposed phases of community engagement. Depending on the aims and characteristics of the partnership, as well as the prior history, context, and relationship between

stakeholders, both health systems and community partners can consider what level of collaboration must take place to achieve equitable process and outcomes.

Figure 12: Healthcare Anchor Network Community Engagement Matrix

Draft Community Engagement Spectrum

HEALTHCARE ANCHOR NETWORK

Intent	Inform	Consult	Involve	Collaborate	Co-Lead (Shared Governance)
Goal	Provide balanced and objective information in a timely manner	Obtain feedback on analysis, issues, and alternative decisions	Work with community to ensure their vision and concerns are considered & understood	Partner with community in each aspect of decision-making	Final decision-making is shared between the community and the institution
Stakeholder experience	I was updated on the work	I gave my input into the work	I gave my input and it's clear that it was considered in the design	I know that my interests are helping to shape the design because I'm regularly at the table	My interests help[ed] shape the vision that's driving all the work
Example Techniques	Fact sheets Websites Open houses	Public comment Focus groups Surveys Public meetings	Workshops Deliberative polling Charettes	Community advisory committees Consensus-building Participatory decision-making	Community oversight boards Ballots Delegated decision-makers
Challenges	Making sure the communications "land" and are meaningful	Agreement that the problem is a shared problem [developing a shared vision]	Setting aside individual interests to allow genuine collaboration	Building genuine empathy and interest in building the capacity of the whole community	Getting people to efficiently and effectively work together from a shared intent

Process and outcomes evaluation is another area for practice consideration. Discussion about industry-wide metrics-tracking has evolved as the healthcare anchor model has proliferated: The Healthcare Anchor Network has developed a standardized set of metrics, based on feedback from current members, that encompass a wide variety of quantifiable characteristics – for example, total amount of place-based investment and breakdown of procurement spend along various criteria including local, diverse, and sustainable vendors. At the health system-level, institutions should consider evaluation in light of target audience, purpose, and format. Internal assessment may be conducted to ensure that a particular anchor strategy is actually

achieving its stated goals, or to align with other institutional motivators such as cost management. Existing conversations around anchor strategy evaluation often tend to focus on the concept of "return on investment", in which health systems look to prove that anchor strategies can contribute to overall cost savings. However, this view may be limited, given that there are several reasons that health systems engage in the healthcare anchor model. Evaluation should therefore take into account these multiple motivators, looking at whether anchor strategies are also contributing to shifts in specific community economic indicators, increasing community capacity, or addressing a specific determinant of health raised by community constituents as an important need.

Finally, health systems should consider how they can leverage their assets to influence social and economic legislation and regulation that are not directly within their control but that contribute to the root causes of health inequities. On the policy front, for example, health systems can leverage their considerable political capital to advocate for the issues impacting their communities, from ensuring the presence of government programs such as the Supplemental Nutrition Assistance Program or Low-Income Housing Tax Credit, as well as state/local employment and wage policies. In these instances, health systems should consider identifying existing policy coalitions and advocacy groups and lending support through staff capacity, convening functions, policymaker relationship-building, and more.

Community Practitioners

One of the key highlights of this study is description of the mutual relationship between anchor institution and the communities that house them. While the majority of the literature predominantly presents the healthcare anchor phenomenon through a public health or healthcare

lens and therefore centers health systems as the primary stakeholder through which to assess anchor impact, implementation of anchor strategies would simply not be feasible without intensive relationship-building and partnership with local small businesses and community-based organizations. Furthermore, the stated aim of anchor strategies is to ensure mutual well-being between health systems and communities. Despite this reality, historical forces and societal norms play a major role in our descriptions of and understanding of anchor strategies. For example, the relationship between a health system and a local supplier might be seen predominantly as a client-vendor relationship rather than a mutual partnership; a place-based investment may reflect the same dynamics as a philanthropic grant from health system to grantee. Traditionally, the community organization is a beneficiary of the anchor institution – but under an anchor frame, there is opportunity to highlight the anchor institution as a beneficiary as well.

With this in mind, community practitioners should consider a diverse set of approaches to partnering with health systems that focus on ensuring strategic value in addition to receiving financing. This could include identifying desired partnership terms, noting specific perspectives or data points that health systems may not be privy to developing a list of questions or requirements for health systems to be held accountable to, providing historical context and articulating existing community reactions to anchor institutions – such as mistrust or confusion – so that any proposed anchor initiative is designed accordingly.

Community practitioners might also consider defining their unique value proposition in a way that moves beyond service delivery or financial return. For example, surfacing and then advocating for the most urgent or most prevalent socioeconomic needs of a community is an enormous asset to a health system that is responsible for addressing health as part of its bottom

line. Community practitioners also possess deep knowledge of their local landscape and can surface suggested interventions, identify ideal execution or operational partners, and mobilize other residents to engage in a particular anchor initiative.

While there are limited tools and resources available for community organizations looking to engage specifically with healthcare anchor institutions, several guides exist within the community economic development and community organizing field. In 2018, UC Berkeley's Othering and Belonging Institute published *Transforming Anchor Institutions,* a 2018 guide for community organizers focused on strategies for ensuring that major economic development initiatives such as affordable housing are also met with a strong community perspective and organized campaigns. Additionally, the numerous healthcare anchor case studies that have been previously developed, as well as the initiatives highlighted in this research, point to a growing body of healthcare anchor-specific best practices for community organizations to also adopt as they see fit. Recommendations for the field might include the development of a technical assistance network to bring together existing programs targeted at supporting community organizations in their engagement efforts with anchor institutions, as well as the development of initiative or field-specific toolkits for community organizations to utilize.

Beyond the level of the individual initiative, community partners can also demand and then play a role in overall governance of healthcare anchor strategies. Several institutions have established community advisory councils and other decision-making bodies that are designed to ensure that community partners have input into anchor priorities, subsequent strategy, and solution identification – in some cases, these community representatives engage in joint decision-making with hospital executive leadership. Community organizations and coalitions should consider advocating for increased formal representation in anchor strategy decision-

making, in turn ensuring that the subject matter expertise of community members is reflected in the design and presumably overall effectiveness of the strategy.

As discussed in Manuscript 3, community practitioners should also consider how an anchor initiative defines health equity in both process as well as outcome, and then consider the various stakeholders involved in an initiative and how those stakeholder perspectives are reflected. "Community" is not a monolith, but rather reflects multiple perspectives, realities, and priorities – it is therefore essential that community partners themselves have mechanisms in place, similarly to health systems, to ensure that both process and outcomes inequities for various subpopulations are being addressed.

Policymakers

Anchor partnerships operate within a broader local, state, and federal ecosystem that is shaped by diverse policies and incentives. One insight that emerged from the research is the importance of policy both in enabling successful anchor partnerships but also in creating the conditions that may necessitate those anchor partnerships in the first place. Both health systems and community partners alike highlighted that in some instances, anchor institutions may be playing a role that otherwise might otherwise be filled by local or state government – for example, providing low-interest loan for small businesses. Resultingly, policymakers should consider the role of government agencies in incentivizing or complementing anchor activity, whether through financing streams or revisiting regulatory requirements.

With respect to food purchasing and protocols specifically, policymakers at the local and state level might consider extending the standards put forth by networks such as the Good Food Financing Program[140] to nonprofit organizations including health systems. Other incentives include the pursuit of Medicaid and Medicare waivers or innovation model that encourage the

use of those funds to address social determinant such as food or housing support. These types of policy action would further deepen the health system motivators identified in Manuscript 1.

Funders

Philanthropic entities are also an important part of the anchor institution ecosystem. Local foundations and individual donors often partner with health systems to catalyze anchor activity. However, one consideration for philanthropists is how their dollars can be best used in light of other asset availability – for example, an examination of the findings in Manuscript 2 shows that many community-based organizations engaged in anchor partnerships still require additional capacity-building support and operational capital in order to meet the demands of their health system partners. This capacity-building funding could come from the health systems themselves, but also presents an opportunity for philanthropic organizations to provide flexible capital at the beginning of a pilot intervention to ensure its ongoing success. Funders might also consider strategies to incentivize healthcare anchor institutions within a region to collaborate with one another on anchor activities rather than compete and create more fragmentation.

7.4 Future Research

The findings from this study also indicate a number of areas for further research. The first is supplementing the qualitative findings in this dissertation with a deeper quantitative lens. For example, it would be valuable to assess the healthcare anchor model's impact at a regional or national industry level – how much healthcare anchor financing is actually being shifted into upstream community interventions? How many individuals, businesses or communities are they impacting? This analysis may also be useful in comparison to traditional spending on social

determinants of health, or to assess magnitude compared to community benefits and philanthropic spending streams.

Relatedly, this research focuses on describing the healthcare anchor model and its associated strategies but does not focus on the actual short-term or long-term outcomes related to those strategies. Additional research is needed to evaluate specific programs – for example, the food system-related anchor strategies referenced in Manuscript 2 and 3, to determine whether they are actually meeting their identified milestones; how this aligns with community need; and what impact this then has on health system practice from a financial and cultural perspective. Long-term, the significant question facing the healthcare anchor model is whether these activities focused on improving the economic determinants of health are in fact having an impact on community-level economic and health outcomes. Additional research is needed to determine whether these programs are increasing employment opportunities, changing wage levels, or increasing resource flows to underinvested communities. And while there is significant literature documenting the link between improved economic outcomes and improved health outcomes, additional research is needed to demonstrate this in the context of healthcare anchor strategies.

This study begins to uncover considerations that are specific to community partners engaged in anchor partnerships – in this case, community partners engaged with the food system. Additional research is required to paint a robust portrait of community stakeholder experiences with anchor institutions, including with different domain areas and types of community organizations, as well as through the use of additional research methodologies including community-based participatory research. While much of the existing anchor institution literature acknowledges the interdependency of institution and community and highlights historical tensions that have existed in these "town-gown" interactions, this same literature has largely

overlooked the essential role that community entities, patients/residents, and other stakeholder including local businesses, government agencies, and local funders also play in ensuring the implementation and success of anchor strategies. Given the stated aim of healthcare anchor strategies in addressing local need and improving community conditions, additional research is needed to understand whether this is indeed taking place.

7.5 Conclusion

The national dialogue surrounding the connection between health inequity and economic inequality has accelerated in recent years.[141] The recent COVID-19 pandemic underscores how tightly intertwined economic stability and health status are for individual and families, as millions face stark tradeoffs related to essential needs such as food, medicine, and rent. This reality has also been a prevalent and urgent theme within healthcare anchor discussions at the institutional and national level. In recent industry conversations, health systems raised various questions and suggestions with respect to their own roles within the local economy; several were considering how they might leverage their economic assets to provide not just short-term relief but also support their own workforce as well as struggling small businesses partners.[142] In this context, it is essential to understand the way that health systems are currently utilizing their positionality as employers, investors, purchasers, and local stakeholders to address economic and social determinants of health.

This research utilized mixed methods to explore the current state of the healthcare anchor model amongst a constituency of health systems that have identified this model as a desired framework for their work, as well as to understand the front-line reality of anchor strategies including what challenges and health equity considerations arise for both health systems and

community partners alike. The results from the research suggest that the healthcare anchor model, while still in the early stages of definition and testing, is a unique and generally well-regarded approach to addressing upstream causes of poor health outcomes. While additional research is needed to understand the impacts of healthcare anchor strategies on their intended outcomes, this dissertation provides important definitional foundation to the literature and surfaces practical recommendations for stakeholders to consider in their work. The findings discussed here may help strengthen the efficacy of existing healthcare anchor strategies as well as contribute to future industry-wide standards for this work.

APPENDICES

Appendix 1: Healthcare Anchor Network Member List (as of Dec 2019)

Appendix 2: Healthcare Anchor Network Document Analysis Codebook

Color	Parent code	Code	Definition
●	Action	Action	Type of activity described
●		Dissemination	Sharing of information or anchor best practices across or amongst entities
●		Capacity-Building	Efforts focused on building the capacity of institutions to engage in anchor practices
●		Learning	Engaging in learning whether via peers, pre-developed content, etc.
●		Aligning	Description of bringing together activities, bridging silos, or aligning distinct stakeholders
●		Coaching	Providing targeted support or technical assistance to conduct anchor work
●		Testifying	Anchor institutions or partners speaking to the impact/value of anchor work
●		Selling	Language focused on making the case for the healthcare anchor model or suggesting/promoting a specific product, organization, or tool
●	Anchor Activities	Anchor Activities	Description of types of anchor activities
●		Advocacy	Health system leveraging their policy or advocacy power to advocate for policies that impact social/structural determinants of health
●		Investment	Health systems utilizing investment dollars or portfolio to make investments in place-based initiatives
●		Hiring	Health systems engaging in hiring initiatives that are focused on improving employment prospects/pipeline for individuals from disadvantaged neighborhoods.
●		Purchasing	Health systems utilizing their procurement spend to purchase from diverse vendors, or other related efforts
●		Discretionary Funding	Discussion of anchor activity utilizing discretionary funding such as philanthropy or grant-making budget
●		Community Collaboration	Description of collaboration with community stakeholders expressly for

			the purposes of anchor strategy identification and implementation
●		Facilities	Healthcare anchor engagement in facilities or real estate development with an explicit anchor lens
●	Critical Analysis	Critical Analysis	Analysis of document characteristics
●		Target Audience	Identification of the specific stakeholders, industries, etc. that the document is targeted at
●		Author Bias	Instances of the author or sponsor organization describing their pre-existing point of view
●		Sponsor of Document	Mention of a funder or sponsor for the document
●		Purpose of Document	Discussion of the purpose of the document, whether as a supplement to another process, as a landscape scan.
●		Type of Document	Report, article, communications document, etc.
●	Lit Review Concepts	Lit Review Concepts	Concepts identified from the literature review for this study
●		Buy-in	Discussion of achieving support/agreement from internal stakeholders regarding the anchor model
●		Facilitators	Factors identified as helpful to executing the healthcare anchor model
●		Structural Racism	Discussion of racism as a force with historical force or structural determinant
●		Health	References to definitions of health, health outcomes, or health inequities
●		Barriers	Factors identified as blocking the execution of the healthcare anchor model
●		Disinvestment	Reduction/pulling of investment dollars from specific neighborhoods or regions
●		Power	Discussion of the capacity or ability to direct or influence events such as funding flows
●		Institutionalization	Description of building the organizational imperative for the anchor model and accompanying processes
●		Governance	Structure or staffing related to execution of the anchor model

●		Food Systems	Identification of components of the food system, from food availability to nutrition to production
●		SDOH	Discussion of social determinants of health including food, housing, employment
●		Equity	Discussion of the importance of fairness or elimination of disparities in outcomes and process
●		Anchor Mission	A commitment to intentionally apply an institution's long-term, place-based economic power and human capital in partnership with community to mutually benefit the long-term well-being of both.
●		Community economic Development	Efforts to invest, support, or finance efforts that are focused on a particular area
●		Employer	Discussion of healthcare anchor institution role in hiring and recruitment
●		Systems Change	Reference to transforming particular industries or structural factors
●		Community Wealth-Building	The practice of ensuring communities can strengthen the local economic base and build wealth locally
●	Stakeholder	Stakeholder	Categories of stakeholders distinctly identified within the document
●		Residents	Individuals that live within vicinity of the health system
●		Community-based organization	Nonprofit or grassroots organizations
●		Financial Institution	Community development financial institutions, banks, or others with financing/lending capacity
●		Funders	Foundations or individual donors
●		HAN Member	A health system with membership in the Healthcare Anchor Network
●		Exec Leadership	Chief or VP-level staff within an institution

Appendix 3: Healthcare Anchor Network Survey Electronic Recruitment and Consent Script

You are being asked to join a research study. This study is being done to learn about your experiences with the Healthcare Anchor Network. You are asked to be in this study because you are a member of the Healthcare Anchor Network.

If you consent to be in this study, you will proceed to press "Start Survey" and begin. The survey will take you about half an hour to finish. You can leave the survey at any time and come back to it to complete. We understand how arduous surveys can be and we are very grateful that you are giving your time to fill this out.

The risks to being in this study are minimal. Some questions may make you uncomfortable. However, the benefits to participating in this study are that you may enjoy sharing your experiences, and the recommendations surfaced in this interview may have the potential to improve the services of the Healthcare Anchor Network, which your organization participates in.

At any point, you can choose not to answer a question, or stop the survey altogether. All of the information you share will be private. The survey does not ask about any personal information. The information that you share may be published in papers in the future, but you will not be identified individually in any way.

If you have any questions, concerns, or complaints about this study, please contact the study student investigator, Sonia Sarkar at 512-680-0980.

If you have any questions about your rights as a research participant, or if you think you have not been treated fairly, you may call the Johns Hopkins School of Public Health Institutional Review Board (IRB) at 410-955-3193 or 1-888-262-3242.

By starting the survey, you are agreeing to participate. If you have questions about your participation in the survey, please reply to the email invitation you received, or contact the study team at ssarkar@democracycollaborative.org.

Appendix 4: Healthcare Anchor Network Survey

Healthcare Anchor Network Annual Survey

Start of Block: CONSENT

Q1 You are being asked to join a research study. This study is being done to learn about your experiences with the Healthcare Anchor Network. You are asked to be in this study because you are a member of the Healthcare Anchor Network. If you consent to be in this study, you will proceed to press “Start Survey” and begin. The survey will take you about half an hour to finish. You can leave the survey at any time and come back to it to complete. We understand how arduous surveys can be and we are very grateful that you are giving your time to fill this out. The risks to participating in this study are minimal. Some questions may make you uncomfortable. However, the benefits to participating in this study are that you may enjoy sharing your experiences, and the recommendations surfaced in this interview may have the potential to improve the services of the Healthcare Anchor Network, which your organization participates in. At any point, you can choose not to answer a question, or stop the survey altogether. All of the information you share will be private. The survey does not ask about any personal information. The information that you share may be published in aggregate in future papers, but you and your institution will not be identified individually in any way. If you have any questions, concerns, or complaints about this study, please contact the study student investigator, Sonia Sarkar at 512-680-0980. If you have any questions about your rights as a research participant, or if you think you have not been treated fairly, you may call the Johns Hopkins School of Public Health Institutional Review Board (IRB) at 410-955-3193 or 1-888-262-3242. By starting the survey, you are agreeing to participate. If you have questions about your participation in the survey, please reply to the email invitation you received, or contact the study team at ssarkar@democracycollaborative.org.

- ○ Consent and start
- ○ Do not consent

End of Block: CONSENT

Start of Block: Your Institution's Anchor Mission and Anchor Strategies

Definitions As you answer the following questions, we have provided the following definitions for your reference.

Anchor Mission: A commitment to intentionally apply an institution’s long-term, place-based

economic power and human capital in partnership with community to mutually benefit the long-

term well-being of both.

Anchor Strategies: Workstreams and programs that an anchor institution deploys -- i.e. local, inclusive hiring or place-based investment.

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Q3 Please briefly describe your institution’s top three priorities for itself and the communities it is located in.

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Q4 How does adopting healthcare anchor strategies help your institution meet those priorities, if at all?

-

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Q5 Does your institution have a comprehensive, institution-wide healthcare anchor mission?

- ○ Yes
- ○ No
- ○ Not Sure

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Q6 At my institution, anchor mission is primarily seen as:

- ○ A singular initiative
- ○ A set of initiatives
- ○ Specific to a particular department or cluster of departments
- ○ A hospital-wide priority
- ○ A health system-wide priority
- ○ Other

Q7 Please describe the external pressures (i.e. regulatory requirements, competition for market share, national quality measures) that compel your institution to adopt a healthcare anchor mission/undertake anchor strategies.

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Q8 Please describe the internal pressures (i.e. desire to take action on social determinants, cost management, clinician demand) that compel your institution to adopt a healthcare anchor mission/undertake anchor strategies.

_____

Q9 How did these external and/or internal pressures influence your institution's decision to join the HAN?

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Q10 Where are you in terms of engaging the following stakeholders on anchor strategies?

	Have not engaged	Beginning to engage	Moderately engaged	Very engaged	Fully committed
Your institution's executive leadership/C-suite	○	○	○	○	○
Your institution's Purchasing business unit leaders	○	○	○	○	○
Your institution's Human Resources business unit leaders	○	○	○	○	○
Your institution's Investment business unit leaders	○	○	○	○	○
Your institution's community partners	○	○	○	○	○
Other anchor institutions in your region	○	○	○	○	○
7	○	○	○	○	○

Q11 What areas does your institution have anchor strategies in? (Please select all that apply.)

- [ ] Inclusive, Local Hiring
- [ ] Inclusive, Local Purchasing
- [ ] Place-Based Investment
- [ ] Collaborating with Community Stakeholders
- [ ] Building the Evidence Base
- [ ] Leveraging Anchor Philanthropy
- [ ] Aligning to Advance Policy
- [ ] Real Estate and Facilities
- [ ] Other

Q12 Where is your institution in terms of scaling implementation of the following anchor strategies?

	Have not started	Have implemented a single process change or initiative	Have implemented several process changes or initiatives	Fully institutionalized and resourced
Local, Inclusive Hiring	0	0	0	0
Local, Inclusive Purchasing	○	○	○	○
Place-Based Investment	○	○	○	○
Building the Evidence Base	○	○	○	○
Collaborating with Community Stakeholders	○	○	○	○
Leveraging Anchor Philanthropy	○	○	○	○
Aligning to Advance Policy	○	○	○	○
Real Estate and Facilities	○	○	○	○

End of Block: Your Institution's Anchor Mission and Anchor Strategies

Start of Block: Healthcare Anchor Network (HAN) and The Democracy Collaborative (TDC)

Q13 Of the options listed below, what do you consider the top three priorities for the HAN?

- [ ] Creating local, inclusive economies that address health inequities
- [ ] Identifying and scaling anchor mission best practices
- [ ] Enabling collaboration amongst health systems pursuing healthcare anchor strategies
- [ ] Building a healthcare system that tackles economic and racial inequity
- [ ] Technical assistance to individual health system members to advance healthcare anchor strategies
- [ ] Developing an evidence base to demonstrate the importance of the anchor mission

Q14 How well does TDC programming address each of the priorities listed above?

	Needs Work	Sufficient	Strong	Not Sure
Creating local, inclusive economies that address health inequities	0	0	0	0
Identifying and scaling anchor mission best practices	○	○	○	○
Enabling collaboration amongst health systems pursuing healthcare anchor strategies	○	○	○	○
Building a healthcare system that tackles economic and racial inequity	○	○	○	○
Technical assistance to individual health system members to advance healthcare anchor strategies	○	○	○	○
Developing an evidence base to demonstrate the importance of the anchor mission	○	○	○	○

Q15 Are there any priorities you think HAN should consider that it's not currently?

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Q16 Please rate TDC on each of the following statements:

	Strongly agree	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree
TDC supplies subject matter expertise to me and my peers.	0	0	0	0	0	0
TDC facilitates stakeholders to co-develop definitions, tools, and more.	○	○	○	○	○	○
TDC is responsive to member-initiated ideas and interests.	○	○	○	○	○	○

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Q17 Please rate how strongly you agree or disagree with the following statement: The Democracy Collaborative staff are effective at guiding the implementation of ideas, strategies, and actions among HAN members.

- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree

End of Block: Healthcare Anchor Network (HAN) and The Democracy Collaborative (TDC)

Start of Block: Partnerships and Alignment Across HAN

Q18 Through participation in HAN, my institution has made valuable connections with other people/institutions that can help advance our anchor mission.

- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree

Q19 The list below includes all of the health system members of the HAN. Please select the Institutions that you have a formal or informal relationship with, related to your anchor work [press CTRL, SHIFT, or ⌘ and hold down to select all institutions on this list for which this applies]. You will be asked a few follow up questions about your relationship with each one in subsequent questions.

- [ ] Advent Health System
- [ ] Advocate Aurora Health
- [ ] Alameda Health System
- [ ] Anchorum St. Vincent
- [ ] BayState Health
- [ ] Bon Secours Mercy Health
- [ ] Boston Children's Hospital
- [ ] Boston Medical Center
- [ ] Catholic Health Initiatives
- [ ] Children's Hospital of Philadelphia
- [ ] Christiana Care Health System
- [ ] CHRISTUS Health
- [ ] Cleveland Clinic
- [ ] Dartmouth-Hitchcock Medical Center

- [ ] Dignity Health
- [ ] Einstein Healthcare Network
- [ ] Fairview Health Services
- [ ] Franciscan Missionaries of Our Lady Health System
- [ ] Geisinger Health System
- [ ] Gundersen Health System
- [ ] Henry Ford Health System
- [ ] Intermountain Healthcare
- [ ] Kaiser Permanente
- [ ] Lurie Children's Hospital of Chicago
- [ ] Maimonides Medical Center
- [ ] MetroHealth System
- [ ] Northwell Health
- [ ] Partners HealthCare
- [ ] Presence Health
- [ ] ProMedica

- [ ] Providence St. Joseph Health
- [ ] Rush University Medical Center
- [ ] RWJBarnabas Health
- [ ] San Mateo County Health
- [ ] Seattle Children's Hospital
- [ ] Trinity Health
- [ ] UC San Francisco
- [ ] UMass Memorial Health Care
- [ ] University Hospitals
- [ ] University of New Mexico Health Sciences Center
- [ ] University of Vermont Medical Center
- [ ] VCU Health

Carry Forward Selected Choices from "The list below includes all of the health system members of the HAN. Please select the Institutions that you have a formal or informal relationship with, related to your anchor work [press CTRL, SHIFT, or ⌘ and hold down to select all institutions on this list for which this applies]. You will be asked a few follow up questions about your relationship with each one in subsequent questions. "

Q20 Please describe how your relationship with each of these partners was developed [select all that apply].

	Through a HAN initiative group that I participate in.	Through a HAN convening or other event, webinar, etc.	Through an institution that was introduced to us via HAN	Through other networks or community forums not related to HAN.	Completely by accident (i.e. met contact outside of work)	Our relationship began prior to participating in HAN, but HAN work has deepened our relationship.	Other	Not Sure
Advent Health System	☐	☐	☐	☐	☐	☐	☐	
Advocate Aurora Health	☐	☐	☐	☐	☐	☐	☐	
Alameda Health System	☐	☐	☐	☐	☐	☐	☐	
Anchorum St. Vincent	☐	☐	☐	☐	☐	☐	☐	
BayState Health	☐	☐	☐	☐	☐	☐	☐	
Bon Secours Mercy Health	☐	☐	☐	☐	☐	☐	☐	
Boston Children's Hospital	☐	☐	☐	☐	☐	☐	☐	
Boston Medical Center	☐	☐	☐	☐	☐	☐	☐	
Catholic Health Initiatives	☐	☐	☐	☐	☐	☐	☐	
Children's Hospital of Philadelphia	☐	☐	☐	☐	☐	☐	☐	

Christiana Care Health System	☐	☐	☐	☐	☐	☐	☐
CHRISTUS Health	☐	☐	☐	☐	☐	☐	☐
Cleveland Clinic	☐	☐	☐	☐	☐	☐	☐
Dartmouth-Hitchcock Medical Center	☐	☐	☐	☐	☐	☐	☐
Dignity Health	☐	☐	☐	☐	☐	☐	☐
Einstein Healthcare Network	☐	☐	☐	☐	☐	☐	☐
Fairview Health Services	☐	☐	☐	☐	☐	☐	☐
Franciscan Missionaries of Our Lady Health System	☐	☐	☐	☐	☐	☐	☐
Geisinger Health System	☐	☐	☐	☐	☐	☐	☐
Gundersen Health System	☐	☐	☐	☐	☐	☐	☐
Henry Ford Health System	☐	☐	☐	☐	☐	☐	☐
Intermountain Healthcare	☐	☐	☐	☐	☐	☐	☐
Kaiser Permanente	☐	☐	☐	☐	☐	☐	☐

Lurie Children's Hospital of Chicago	☐	☐	☐	☐	☐	☐	☐
Maimonides Medical Center	☐	☐	☐	☐	☐	☐	☐
MetroHealth System	☐	☐	☐	☐	☐	☐	☐
Northwell Health	☐	☐	☐	☐	☐	☐	☐
Partners HealthCare	☐	☐	☐	☐	☐	☐	☐
Presence Health	☐	☐	☐	☐	☐	☐	☐
ProMedica	☐	☐	☐	☐	☐	☐	☐
Providence St. Joseph Health	☐	☐	☐	☐	☐	☐	☐
Rush University Medical Center	☐	☐	☐	☐	☐	☐	☐
RWJBarnabas Health	☐	☐	☐	☐	☐	☐	☐
San Mateo County Health	☐	☐	☐	☐	☐	☐	☐
Seattle Children's Hospital	☐	☐	☐	☐	☐	☐	☐
Trinity Health	☐	☐	☐	☐	☐	☐	☐

UC San Francisco	☐	☐	☐	☐	☐	☐	☐
UMass Memorial Health Care	☐	☐	☐	☐	☐	☐	☐
University Hospitals	☐	☐	☐	☐	☐	☐	☐
University of New Mexico Health Sciences Center	☐	☐	☐	☐	☐	☐	☐
University of Vermont Medical Center	☐	☐	☐	☐	☐	☐	☐
VCU Health	☐	☐	☐	☐	☐	☐	☐

Carry Forward Selected Choices from "The list below includes all of the health system members of the HAN. Please select the Institutions that you have a formal or informal relationship with, related to your anchor work [press CTRL, SHIFT, or ⌘ and hold down to select all institutions on this list for which this applies]. You will be asked a few follow up questions about your relationship with each one in subsequent questions. "

Q21 Please indicate what this partnership has resulted in [select all that apply].

	My institution has provided advice or tools	My institution has received advice or tools	My institution has provided financial resources	My institution has received financial resources	My institution has launched new programs	My institution has improved existing programs	My institution has identified process or outcome metrics
Advent Health System	☐	☐	☐	☐	☐	☐	☐
Advocate Aurora Health	☐	☐	☐	☐	☐	☐	☐
Alameda Health System	☐	☐	☐	☐	☐	☐	☐
Anchorum St. Vincent	☐	☐	☐	☐	☐	☐	☐
BayState Health	☐	☐	☐	☐	☐	☐	☐
Bon Secours Mercy Health	☐	☐	☐	☐	☐	☐	☐
Boston Children's Hospital	☐	☐	☐	☐	☐	☐	☐
Boston Medical Center	☐	☐	☐	☐	☐	☐	☐
Catholic Health Initiatives	☐	☐	☐	☐	☐	☐	☐
Children's Hospital of Philadelphia	☐	☐	☐	☐	☐	☐	☐
Christiana Care Health System	☐	☐	☐	☐	☐	☐	☐

CHRISTUS Health	☐	☐	☐	☐	☐	☐	☐
Cleveland Clinic	☐	☐	☐	☐	☐	☐	☐
Dartmouth-Hitchcock Medical Center	☐	☐	☐	☐	☐	☐	☐
Dignity Health	☐	☐	☐	☐	☐	☐	☐
Einstein Healthcare Network	☐	☐	☐	☐	☐	☐	☐
Fairview Health Services	☐	☐	☐	☐	☐	☐	☐
Franciscan Missionaries of Our Lady Health System	☐	☐	☐	☐	☐	☐	☐
Geisinger Health System	☐	☐	☐	☐	☐	☐	☐
Gundersen Health System	☐	☐	☐	☐	☐	☐	☐
Henry Ford Health System	☐	☐	☐	☐	☐	☐	☐
Intermountain Healthcare	☐	☐	☐	☐	☐	☐	☐
Kaiser Permanente	☐	☐	☐	☐	☐	☐	☐
Lurie Children's Hospital of	☐	☐	☐	☐	☐	☐	☐

Chicago							
Maimonides Medical Center	☐	☐	☐	☐	☐	☐	☐
MetroHealth System	☐	☐	☐	☐	☐	☐	☐
Northwell Health	☐	☐	☐	☐	☐	☐	☐
Partners HealthCare	☐	☐	☐	☐	☐	☐	☐
Presence Health	☐	☐	☐	☐	☐	☐	☐
ProMedica	☐	☐	☐	☐	☐	☐	☐
Providence St. Joseph Health	☐	☐	☐	☐	☐	☐	☐
Rush University Medical Center	☐	☐	☐	☐	☐	☐	☐
RWJBarnabas Health	☐	☐	☐	☐	☐	☐	☐
San Mateo County Health	☐	☐	☐	☐	☐	☐	☐
Seattle Children's Hospital	☐	☐	☐	☐	☐	☐	☐
Trinity Health	☐	☐	☐	☐	☐	☐	☐
UC San Francisco	☐	☐	☐	☐	☐	☐	☐

UMass Memorial Health Care	☐	☐	☐	☐	☐	☐	☐
University Hospitals	☐	☐	☐	☐	☐	☐	☐
University of New Mexico Health Sciences Center	☐	☐	☐	☐	☐	☐	☐
University of Vermont Medical Center	☐	☐	☐	☐	☐	☐	☐
VCU Health	☐	☐	☐	☐	☐	☐	☐

Q22 Interaction with HAN members has added value to my work.

- ○ Strongly agree
- ○ Somewhat agree
- ○ Neither agree nor disagree
- ○ Somewhat disagree
- ○ Strongly disagree

Q23 HAN members work jointly to advance HAN goals in a coordinated manner.

- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree

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Q24 New and/or strengthened stakeholder or community partnerships have formed as a result of being part of HAN.

- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree

End of Block: Partnerships and Alignment Across HAN

Start of Block: HAN Impact on Internal Capacity

Q25 What is the greatest value/benefit that you or your institution gain through membership in the Healthcare Anchor Network?

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Q26 Please rate how strongly you agree or disagree with the following statements:

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
I am able to execute anchor strategies at my institution more quickly as a result of being in the HAN.	○	○	○	○	○
HAN has provided tools and resources that increase my capacity to implement anchor strategies at my institution.	○	○	○	○	○
Participating in the HAN has encouraged me to share my own knowledge, experiences, and skills with other members.	○	○	○	○	○
My involvement in the HAN has increased my ability to communicate the importance of the anchor mission or strategies.	○	○	○	○	○
As a result of being part of the HAN, I	○	○	○	○	○

am better able to operationalize my institution's overall strategic priorities through the use of an anchor mission.					
The HAN has provided knowledge and resources that I have not found in other professional networks.	0	0	0	0	0

Q27 As a result of participating in the HAN, my institution has increased capacity (i.e. gained knowledge or skills) to implement the following anchor strategies:

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
Local, Inclusive Hiring	0	0	0	0	0
Local, Inclusive Purchasing	○	○	○	○	○
Place-Based Investment	○	○	○	○	○
Collaborating with Community Stakeholders	○	○	○	○	○
Building the Evidence Base	○	○	○	○	○
Leveraging Anchor Philanthropy	○	○	○	○	○
Advancing Advocacy and Policy	○	○	○	○	○

Q28 To what degree does your institution replicate and scale best practices learned through the HAN?

- ○ Not at all
- ○ A small amount
- ○ A fair amount
- ○ A great deal

Q29 The HAN provides opportunities for healthcare systems to align around national policy and advocacy priorities.

- ○ Strongly agree
- ○ Somewhat agree
- ○ Neither agree nor disagree
- ○ Somewhat disagree
- ○ Strongly disagree

Q30 With respect to the following activities, how much has HAN strengthened or deepened your institution's impact?

	Not at all	A small amount	A fair amount	A great deal
Ability to define organizational imperative around building inclusive local economies	0	0	0	0
Ability to articulate how anchor strategies contribute to inclusive local economies	○	○	○	○
Ability to communicate the role of your health system in advancing equity	○	○	○	○
Implementing anchor strategies that address economic determinants of health	○	○	○	○
Establishing community health outcomes	○	○	○	○
Establishing community economic outcomes	○	○	○	○
Competency in engaging community stakeholders as partners, not simply beneficiaries of services	○	○	○	○

Ability to conduct internal and external asset mapping	0	0	0	0

Q31 How has your institution's level of commitment to the healthcare anchor mission changed since joining the HAN?

- Decreased
- No change
- Increased
- Not sure

Q32 To what degree has adoption of the following policy or practice changes taken place at your institution as a result of being involved with HAN?

	Not at all	A small amount	A fair amount	A great deal
Adopting the anchor mission as an institutional strategic priority	0	0	0	0
Anchor mission owned by an executive leader	○	○	○	○
FTE capacity added to operationalize anchor mission	○	○	○	○
Implementation of Anchor Mission Steering Committee	○	○	○	○
Modified hiring and workforce development protocols	○	○	○	○
Modified contracting and supply chain protocols	○	○	○	○
Modified treasury investment policy and practices	○	○	○	○
Prioritized anchor-related policy or advocacy issues	○	○	○	○
Modified internal data collection to include anchor-related metrics	○	○	○	○

Q33 Please indicate if the following tools have been helpful in carrying out your organization's anchor strategies:

	Have not used this tool	Not helpful at all	Slightly helpful	Somewhat helpful	Very helpful
Hospital Toolkits	○	○	○	○	○
1-page overview of Anchor Strategies [Hiring, Purchasing, Investment]	○	○	○	○	○
Achieving Health Equity Overview PPT deck	○	○	○	○	○
Promedica and/or Rush Handbooks	○	○	○	○	○
Social Determinants of Health Evidence Overview	○	○	○	○	○
Other	○	○	○	○	○

Carry Forward Selected Choices from "Please indicate if the following tools have been helpful in carrying out your organization's anchor strategies:"

Q34 Who were the tools shared with?

	C-Suite	Board of Directors	Staff peers	External Stakeholders	Other
Hospital Toolkits	☐	☐	☐	☐	☐
1-page overview of Anchor Strategies [Hiring, Purchasing, Investment]	☐	☐	☐	☐	☐
Achieving Health Equity Overview PPT deck	☐	☐	☐	☐	☐
Promedica and/or Rush Handbooks	☐	☐	☐	☐	☐
Social Determinants of Health Evidence Overview	☐	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐

Carry Forward Selected Choices from "Please indicate if the following tools have been helpful in carrying out your organization's anchor strategies:"

Q35 Why were the tools shared?

	To explain anchor strategies	Strategic planning	Securing funding for anchor strategies	Identifying programs for implementation	Defining outcomes for anchor programs	Developing partner relationships	To create buy-in for joining HAN
Hospital Toolkits	☐	☐	☐	☐	☐	☐	☐
1-page overview of Anchor Strategies [Hiring, Purchasing, Investment]	☐	☐	☐	☐	☐	☐	☐
Achieving Health Equity Overview PPT deck	☐	☐	☐	☐	☐	☐	☐
Promedica and/or Rush Handbooks	☐	☐	☐	☐	☐	☐	☐
Social Determinants of Health Evidence Overview	☐	☐	☐	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐	☐	☐

Carry Forward Selected Choices from "Please indicate if the following tools have been helpful in carrying out your organization's anchor strategies:"

Q36 What were the results of sharing the tools?

	Changed policies and/or practices	Increased financial resources for anchor mission	Increased impact in anchor strategies	More buy-in internally	Different or increased external partnerships	Becoming a HAN member	Other
Hospital Toolkits	☐	☐	☐	☐	☐	☐	☐
1-page overview of Anchor Strategies [Hiring, Purchasing, Investment]	☐	☐	☐	☐	☐	☐	☐
Achieving Health Equity Overview PPT deck	☐	☐	☐	☐	☐	☐	☐
Promedica and/or Rush Handbooks	☐	☐	☐	☐	☐	☐	☐
Social Determinants of Health Evidence Overview	☐	☐	☐	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐	☐	☐

Q37 To what degree has your institution been, through HAN, exposed to best practices for implementation from health system peers?

- Not at all
- A small amount
- A fair amount
- A great deal

Q38 Do you currently engage community members in any institutional decision-making processes or forums related to your anchor mission and/or strategies?

- Yes
- No
- Not Sure

Q39 How often do you share knowledge/resources with other HAN members outside of HAN-facilitated activities? Give your best estimate.

- Daily
- Weekly
- Monthly
- Quarterly
- Yearly
- Never

Q40 Have you created or been a part of any resources/publications related to the HAN?

- Yes
- No
- Not Sure

Q41 How many times in the past year have you personally presented on work, either internally or externally, that relates to the HAN or your institution's anchor mission? (Please identify a number. Give your best estimate.)

-

Q42 I utilize healthcare anchor language and messaging, rather than solely utilizing population health/community benefit language, internally to create buy-in for activities that I lead.

- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree

Q43 Please give your best estimate of the number of people in your institution engaged in healthcare anchor mission or strategies, at the following levels of involvement:

0 5 10 15 20 25 30 35 40 45 50

Health system executive leadership	
Hospital executive leadership	
Department leaders	
Program or frontline staff	

-

Q44 How many times in the past year have you personally participated in the following HAN events? Please give your best estimate.

	0	1	2	3	4	5	6	7	8	9	10	11	12
Convenings													
Webinars													
Initiative Groups													

-

Q45 How will the amount of staff time committed to HAN events and other related work change in the upcoming year?

- ○ Increase
- ○ Remain the same
- ○ Decrease
- ○ Not sure

End of Block: HAN Impact on Internal Capacity

Start of Block: HAN Influence

Q46 Are you a part of any other networks related to anchor strategies? Please select all that apply:

- [ ] Institute for Healthcare Improvement
- [ ] American Hospital Association
- [ ] Center for Community Investment
- [ ] Health Care Without Harm
- [ ] Other (please specify)

-

Q47 What are the characteristics of HAN that make it uniquely different and/or beneficial to your work?

-

Q48 Networks can exist for a variety of reasons. To what degree is HAN effective in the following areas?

	Extremely good	Somewhat good	Neither good nor bad	Somewhat bad	Extremely bad
Enabling shared learning	○	○	○	○	○
Developing network-wide standards	○	○	○	○	○
Disseminating best practices	○	○	○	○	○
Fostering relationships between members	○	○	○	○	○
Creating shared network vision and goals	○	○	○	○	○

Q49 What do you hope to gain from future participation with the HAN?

Q50 What are some of the challenges you think the HAN currently faces?

Q51 Do you have any suggestions for how to mitigate the challenges you've outlined above?

Q52 Do you have any other thoughts, comments, questions, or ideas for

how the HAN could have greater impact?

-

Q57 What is your role at your institution?

-

Q58 How long have you been engaged with the Healthcare Anchor Network?

- 0-3 months
- 4-6 months
- 7-12 months
- More than one year
- More than two years

End of Block: HAN Influence

Appendix 5: Health System Stakeholder Interview Recruitment Email

Hi XXX,

I hope you are well. I am a DrPH candidate at the Johns Hopkins Bloomberg School of Public Health and am conducting my dissertation on the characteristics of healthcare anchor strategies that focus on food systems, including a deep dive into the barriers and facilitators facing those involved in implementation of those strategies, as well as perspectives on how health equity principles are incorporated.

In speaking with the HAN team, we thought that [your institution's] role in [specific food systems anchor strategy], aligns strongly with and would provide valuable insights into the questions that this research is posing. I'm looking to interview a few different health systems across HAN, as well as their relevant community partners: participation involves a 45-60 minute interview and would occur in person (I will travel to you). To be eligible for the study, one must be:

- Over 18 years old
- Fluent in English
- Involved in the implementation of said healthcare anchor strategy and knowledgeable about the related opportunities and challenges

If you are open to it, I would be available to come visit you in the Bay Area to conduct the interview in person. All information collected during the interviews will be confidential.

If you and/or any colleagues would be open to participating, or if you have any questions, please contact me at ssarkar3@jhu.edu or 512-680-0980.

Thank you for your time!

Best,
Sonia

Appendix 6: Health System Stakeholder Interview Guide

Introductory Questions	*Can you state your name?*
	What is your organization and role at that organization?
	Can you describe [insert anchor food systems initiative here]?
	What is your specific involvement in the initiative?
Initiative Details - General	*How did the initiative start?*
	Who are the stakeholders involved in the initiative?
	What is the governance structure for this initiative?
	How is the initiative funded?
	Tell me about the intended goals and outcomes for the initiative.
Initiative Details - Anchor	*How would you define what it means to be an anchor institution?* **Anchor Mission:** A commitment to intentionally apply an institution's long-term, place-based economic power and human capital in partnership with community to mutually benefit the long-term well-being of both.
	How does your institution operate as an anchor institution?
Initiative Details – Food Systems	*How does this initiative tackle inequities in the food system?*
	What is your institution's overall approach to engaging with the food system?
	How does your institution's food systems strategy align with your institution's anchor strategy?
Reflections on Barriers/Facilitators	*What are the challenges your initiative faces in achieving its goals and outcomes?*
	What factors have been helpful for your initiative in achieving its goals and outcomes?
	Of those challenges and facilitators, do you think any are unique to anchor institution partnerships?
	What advice would you give to another group hoping to launch a similar initiative?
	What has been the initiative's greatest accomplishment thus far?
	What enabled this?
	What has been the biggest lesson learned?
Reflections on Health Equity	*How would you define health equity? (give examples)* **Standard definition:** Fair distribution of health determinants, outcomes and resources between segments of the population regardless of social standing.
	What aspects of the initiative do you feel are equitable?

	What aspects of the initiative could be more equitable?
	How does the initiative specifically engage or involve its intended end-users? Community partners in general?
	How was the need for this particular solution identified?
	What are the challenges in building an equitable initiative?
Conclusions	*Is there anything else you would like to tell me about this initiative?*
	Is there anyone else I should talk to in order to understand the initiative?

Appendix 7: Community Stakeholder Interview Guide

Introductory Questions	*Can you state your name?*
	What is your organization and role at that organization?
	Can you describe [insert anchor food systems initiative here]?
	What is your specific involvement in the initiative?
Initiative Details - General	*How did the initiative start?*
	Who are the stakeholders involved in the initiative?
	What is the governance structure for this initiative?
	How is the initiative funded?
	Tell me about the intended goals and outcomes for the initiative.
Initiative Details - Anchor	*How would you define an anchor institution?* **Anchor Mission:** A commitment to intentionally apply an institution's long-term, place-based economic power and human capital in partnership with community to mutually benefit the long-term well-being of both. (give an example)
	How does your organization interface with anchor institutions, if at all?
	[If does] Why does your organization interface with anchor institutions?
	What are the challenges your organization faces in engaging with anchor institutions?
	What has been helpful for your organization in engaging with anchor institutions?
Initiative Details – Food Systems	*How does this initiative tackle inequities in the food system?*
	What is your institution's overall approach to engaging with the food system? (follow-up re: policy, service delivery, etc.)
	How does your institution's food systems strategy align with your institution's anchor strategy?
Reflections on Barriers/Facilitators	*What are the challenges your initiative faces in achieving its goals and outcomes?*
	What factors have been helpful for your initiative in achieving its goals and outcomes?
	Of those challenges and facilitators, do you think any are unique to anchor institution partnerships?
	What advice would you give to another group hoping to launch a similar initiative?
	What has been the initiative's greatest accomplishment thus far?
	What enabled this?
	What has been the biggest lesson learned?

Reflections on Health Equity	*How would you define health equity? (give examples)* **Standard definition:** Fair distribution of health determinants, outcomes and resources between segments of the population regardless of social standing.
	What aspects of the initiative do you feel are equitable?
	What aspects of the initiative could be more equitable?
	How does the initiative specifically engage or involve its intended end-users? Community partners in general?
	How was the need for this particular solution identified?
	What are the challenges in building an equitable initiative?
Conclusions	*Is there anything else you would like to tell me about this initiative?*
	Is there anyone else I should talk to in order to understand the initiative?

Appendix 8: Oral Consent Script: Health System and Community Stakeholders Interviews

Before we start, I'd like to go over some information with you. If you have any questions, please let me know.

You are being asked to join a research study. This study is being done to learn about the characteristics of healthcare anchor strategies focused on food systems. You are asked to be in this study because you are a stakeholder engaged in anchor strategy work.

If you consent to be in this study, I will interview you for 45-60 minutes. I will ask questions about things like the work and culture of your organization, the opportunities and challenges you face in implementing anchor strategies, and the role of health equity in the work that you do. If I have your permission, I will record the interview so that I don't miss anything.

The risks to being in this study are minimal. Some questions may make you uncomfortable. However, the benefits to participating in this study are that you may enjoy sharing your experiences, and the recommendations surfaced in this interview may have the potential to improve the services of the Healthcare Anchor Network, which your organization participates in.

At any point, you can choose not to answer a question, or stop the interview. You can also choose not to have the interview recorded.

All of the information you share with me will be private. I will not ask about any personal information and will not identify you in any way on the recording or in my notes. The information that you share may be published in papers in the future, but you will not be identified individually in any way.

If you have any questions, concerns, or complaints about this study, please contact the study Principal Investigator, Shannon Frattaroli at 443-670-4927.

If you have any questions about your rights as a research participant, or if you think you have not been treated fairly, you may call the Johns Hopkins School of Public Health Institutional Review Board (IRB) at 410-955-3193 or 1-888-262-3242.

Do you have any questions? Would you like to participate in this study? (Indicate yes/no)

Appendix 9: IRB Determination of Exemption

JOHNS HOPKINS
BLOOMBERG SCHOOL
of PUBLIC HEALTH

FWA #00000287

Institutional Review Board Office

615 N. Wolfe Street / Room E1100
Baltimore, Maryland 21205-2179
Phone: 410-955-3193
Toll Free: 1-888-262-3242
Fax: 410-502-0584
Email: jhsph.irboffice@jhu.edu
Website: www.jhsph.edu/irb

NOT HUMAN SUBJECTS RESEARCH
DETERMINATION NOTICE

Date: June 20, 2019

To: Shannon Frattaroli, PhD
(Sonia Sarkar)
Department of Health Policy and Management

Re: **Study Title**: "Local Health System Investments to Address Social and Economic Determinants of Health: A National Network Perspective"
IRB No: 00009642

The JHSPH IRB reviewed the above-referenced new application on **June 17, 2019**. We have determined that the proposed activity described in your application will involve conducting a survey and in-depth key informant interviews to assess the effectiveness and impact of the Healthcare Anchor Network in advising and supporting hospitals to engage as community anchor institutions. No personal or private information will be collected. Thus, the proposed activity does not qualify as human subjects research as defined by DHHS regulations 45 CFR 46.102, and does not require IRB oversight.

We anticipate that you will follow ethical practices in your interactions with individuals in the community during the course of your project. You are responsible for notifying the JHSPH IRB of any future changes that might involve human subjects and require IRB oversight.

If you have any questions regarding this action, please contact the JHSPH IRB Office at (410) 955-3193 or via email at jhsph.irboffice@jhu.edu.

ES/teb

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Education

JOHNS HOPKINS UNIVERSITY, Bachelor of Arts in Public Health and International Studies, *May 2008* – Dean's List
JOHNS HOPKINS BLOOMBERG SCHOOL OF PUBLIC HEALTH, Masters of Public Health, *May 2013* – Dean's Scholar
JOHNS HOPKINS BLOOMBERG SCHOOL OF PUBLIC HEALTH, Doctorate of Public Health, *Anticipated May 2020*

Professional Experience

Social Entrepreneur-in-Residence, Common Future *August 2019-Present*

Lead strategic initiative to define community financing infrastructure for health, including the intersection of economic justice and social determinants conversations. Develop network and toolkit to support communities in partnering with healthcare institutions, foundations, hospitals and payors, and financial institutions to shift capital, address inequities, and democratize both how we deliver and pay for health across the counry.

Lead, Healing Capital *May 2018-Present*

Provide strategic guidance to public, nonprofit, and private clients working on health systems transformation:

- Build Healthy Places Network (beginning Spring 2020) – Support Network's Community Innovations program to deepen outreach to community development corporations that serve low-income communities and people of color. Provide technical assistance to CDCs and connect them to national dialogues regarding the intersection of racial equity, health equity, investment pipelines, and determinant of health.
- The Democracy Collaborative -- Provide facilitation, evaluation, and fundraising support to the Healthcare Anchor Network (HAN), an initiative of The Democracy Collaborative, a national action tank dedicated to economic inclusion and community development. Support on leveraging anchor philanthropy and community stakeholder collaboration initiatives for network's 42 large health systems (Kaiser Permanente, CommonSpirit, etc.) committed to upstream health investments and community economic development.
- The Health Initiative/North Carolina Department of Health and Human Services – Advise Secretary of Health and develop blueprint for statewide Healthy Opportunities Pilot ecosystem, including elements necessary to ensure achievement of Medicaid waiver goals (such as technology infrastructure, workforce, capacity; develop investment strategy to secure resources from public/private sectors and provide support to ecosystem actors including payors, foundations, govt agencies to ensure SDOH are addressed.
- Health Leads – Advised on emerging strategy and approaches to engaging community partners on SDOH issues; facilitated conversations to enable env. scan/gap analysis of Maryland community health initiatives.

Baltimore City Health Department *December 2015-January 2018*

Chief Policy and Engagement Officer

Served as member of senior leadership team at Baltimore City Health Department, overseeing initiatives related to fundraising, community engagement, strategic planning, and policy and legislative agenda. Developed strategic plan for health equity for the city and built collaborative partnerships with key stakeholders across community in order to identify top public health priorities and increase awareness of Health Department services.

Key Activities:

- Oversaw Healthy Baltimore 2020 strategic planning process, engaging internal health department staff as well as external partners –hospitals, health centers, local businesses, and social services providers-- to develop comprehensive, five-year blueprint for health across Baltimore City. Built strategic objectives around health equity goals, including metrics targeted at decreasing key health disparities related to upstream factors contributing to chronic disease, violence, substance use, and aging.
- Led Baltimore City Accountable Health Community initiative in response to funding round from the Centers for Medicare and Medicaid Innovation. Convened all Baltimore city health systems, federally qualified health centers, behavioral healthcare providers, and community-based organizations to develop systems/technology approach for addressing patients' social determinants and linking clinic to community; centralized population health/social det.. initiatives within agency to ensure alignment and coordination.
- Coordinated fundraising efforts across agencies and led/supported grant proposals to local and national foundations including Open Society Institute-Baltimore; Weinberg Foundation; and Abell Foundation.
- Managed local, state, and federal-level policy portfolio, advocating for public health legislation ranging from expanded funding for maternal/child health care coordination to increased tobacco tax; produce high-level strategy and build relationships with Baltimore City policy delegation and state agencies.

- Developed and implement public health education campaigns to improve health, including implementation of community-based forums, development of targeted communications materials, and media strategy.

AVIA Health Innovation *March 2015-November 2015*

Director, Provider Solutions

- Identified innovative, early and mid-stage technology solutions to pressing challenges in healthcare, including patient engagement and care coordination through AVIA, a health system-led accelerator. Partnered with healthcare providers to assess and develop readiness for disruptively improving the patient experience – via (1) nuanced due diligence and landscape analysis; (2) coaching of early stage health technology ventures, (3) engagement with local and national venture/social innovation community, (4) technology and use case design with leading national health systems; (5) strategic relationships with change agents and influencers.

Health Leads National *June 2009-March 2015*

Chief of Staff to CEO/Special Advisor, Catalyze

- Served as member of senior team and provided critical, high level support to CEO and Executive Team of Health Leads, a national healthcare social enterprise that seeks to shift from health*care* to health by addressing all patients' basic resource needs as a standard part of quality care. Joined organization as early founding member: served as liaison to national Board of Directors and supported in relationship management for CEO's strategic partnerships throughout 8+ years of rapid growth and scale.

Key Activities:

- Supported development of organizational strategies to position Health Leads as market leader on integrating patients' resource needs as a standard part of quality care, including identification of levers to achieve market pull and sector prominence, partnership structure with leading healthcare systems, development of program resource directory/case management technology & engagement of Health Leads' healthcare alumni.
- Managed internal/external CEO initiatives and created thought leadership and storytelling platform for self, CEO and senior leadership team, including presentations at prominent sector venues including: TEDMED, Institute for Healthcare Improvement National Quality Forum, Ashoka Changemakers Summit, World Economic Forum, Skoll World Forum for Social Entrepreneurship, Mayo Clinic Transform Symposium, CDC Public Health Leadership Forum, Schwab Social Entrepreneur Network, etc.
- Provided key stewardship support to CEO in raising $28M+ of philanthropic growth capital & $5M in operating rev., including $16M investment from The Robert Wood Johnson Foundation and $1M from Physicians Foundation.
- Supported formation of Health Leads 'Catalyze Council', an advisory body focused on transforming care delivery and building the organization's sector leadership strategy – included representatives from Kaiser Permanente, Johns Hopkins Hospital, Brookings Institution, Partners in Health, Kresge Foundation.
- Participated in selection, onboarding, and lateral management of senior leadership team, including six VP-level hires – worked with each VP and their emerging functions (sales, R&D) to ensure high-quality deliverables and processes.
- Developed organizational health leadership competency model via research and input from National Center for Healthcare Leadership, American Association of Medical Colleges, and Institute for Healthcare Improvement; oversaw integration of competency model into training, professional development, and community-building for 5000+ student advocates and alumni pursuing trajectories in health and medicine.

Health Leads Baltimore *August 2006-June 2009*

Co-Founder, Campus Coordinator, and Volunteer

- Set vision and goals for local chapter with Baltimore City Health Commissioner Dr. Josh Sharfstein to establish Help Desks at substance abuse centers, health department clinics, private hospitals, and federally health centers
- Met with key urban policymakers such as US Rep. Elijah Cummings, Maryland Secretary of Health John Colmers, Baltimore City Housing Commissioner Paul Graziano, etc. to discuss access and quality for low-income families
- Developed campus recruitment materials, ran leadership development with program coordinators, built training curriculum for Advocates, conducted evaluation and assessment of services, created community partnerships

Program Manager

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- Managed program operations and clinic relationships at Health Leads' program sites at Johns Hopkins Harriet Lane Clinic and Bayview Medical Center, including development of new technology and tools for screening/referral → grew workforce to ~200 undergraduate advocates serving 3000+ low-income patients
- Conducted research to assess impact of desk model on patients and drive performance improvement
- Provided ongoing performance management support and leadership development to Advocates
- Piloted Program Manager position and served as advisor to emerging Program Manager cohort (now 20+)

Baltimore City Mayoral Fellow *June-August 2008*

Health Department- Healthy Homes Division

- Engage in policy development, administrative streamlining, and client outreach for Healthy Homes Division
- Conduct field visits and present 10-week report on legislative recommendations to Mayor Sheila Dixon

Boards, Residencies, and Advisory Roles

Culture of Health Leader, Robert Wood Johnson Foundation *September 2017-Present*

One of 40 health equity leaders recognized nationally for successful track record of conducting community-based work to promote health equity via multi-sector collaborations and systems change. Working to promote RWJF's vision of a "Culture of Health", in partnership with innovators, activists, and professionals representing diverse sectors i.e. design, technology, affordable housing, and transportation.

Lerner Fellow, Johns Hopkins Center for a Livable Future *September 2017-Present*

In recognition of individuals committed to the discovery and application of knowledge about public health challenges associated with the creation of a healthier, more equitable, resilient, and sustainable food system.

Millennial Policy Initiative *March 2018-December 2018*

Senior Fellow, Health Commission

Serve as advisor to year-long incubator for progressive policy reform and dialogue in partnership with elected officials across the country as well as organizations including ACLU and Emerge America.

New America *June 2017-October 2018*

Public Interest Technology Fellow/Health Policy Fellow

One of 20 public interest technology fellows selected nationally to strengthen the field of civic technology at New America, a progressive think tank. Focused on the intersection of community engagement, technology, and addressing health disparities by enabling the integration of healthcare and social services systems.

Johns Hopkins Technology Ventures Social Innovation Lab *January 2017-Present*

Advisory Board Member

- Mentor early-stage ventures taking part in Johns Hopkins Social Innovation Lab program; provide strategic guidance to program leadership and facilitate connections/opportunities for teams in Baltimore and nationally.

Brown University *January 2016-January 2017*

Adjunct Lecturer; Social Entrepreneur in Residence and Taubman Fellow

- Mentor undergraduate and graduate students interested in pursuing social ventures or careers in social innovation. Develop and co-teach for-credit course focused on intersection of social entrepreneurship and public health, as well as conduct research and practice projects in conjunction with Brown faculty.

BLK SHP *January 2015-January 2017*

Social Entrepreneur in Residence

- Act as advisor and operational lead for BLK SHP, a collective and movement of leading creative thinkers, entrepreneurs, artists, and writers focused on building ecosystems to help unlock the creativity and voice of socially conscious innovators, as well as provide a platform to disseminate cutting edge thought leadership, art & culture, and socially influential ventures. Led 2.5 week cross-country bus tour to highlight narratives of social entrepreneurs in communities typically overlooked by mainstream media, in partnership with PBS, MTV, Fuse.

Johns Hopkins School of Public Health *July 2014-Present*

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Global Alumni Network – Leadership Committee

Johns Hopkins University *August 2008 – Present*
Alumni Executive Committee

Health Leads (formerly Project HEALTH) *August 2007 – September 2008*
Board Member, Health Leads National Board of Directors

Selected Awards and Honors

- Harry S. Truman Scholar, 2008/Truman-Albright Fellow, 2009/Truman Governance Fellow, 2016
- Robert Wood Johnson Foundation Culture of Health Leader, 2017-2020
- Center for a Livable Future Lerner Fellow, 2017
- New America Public Interest Technology Fellow, 2017
- World Economic Forum Young Global Shaper
- Harvard Medical School InciteHealth Fellow, 2015
- Kresge Fdn/AcademyHealth Pop Health Scholar, 2014
- New Leaders Council Fellow, 2015
- Schusterman Foundation REALITY Scholar, 2014
- Speaker, TEDxJohnsHopkinsUniversity, 2016
- Judith O'Connor BoardSource Emerging Nonprofit Leader Scholarship Recipient, 2010
- South Asian Changemaker of the Year, SAALT (South Asian Americans Leading Together), 2009
- Rotary Cultural Ambassadorial Scholar, 2009
- USA Today University All-Academic Team, 2008

Teaching, Research and Publications

-Co-organizer and instructor, **PLCY 1810 Models for Sustaining Social Transformation** course for Brown undergraduates
-Co-organizer and instructor, **208.111 Urban Health & Advocac**y course for Johns Hopkins undergraduates
-Freelance Writer, Bloomberg American Health: covering pressing domestic public health issues facing the United States, including opioid epidemic, gun violence, and obesity/food systems and climate change – reach policymakers, academics, etc.
-S. Sarkar. "The Patient Will See You Now". *Pacific Standard.* March 2018.
-S. Sarkar, M. Fried, L. Wen. "When Social Needs are Medical Needs". *Slate.* January 2018.
-S. Sarkar, D. O'Neill, L. Wen. "Building Baltimore's Accountable Health Community". *NEJM Catalyst.* June 2017.
-**S. Sarkar,** L. Wen. "Bridging Clinic to Community in Baltimore." *Maryland Daily Record.* May 2017.
-S. Sarkar. "One Summer Day." *Johns Hopkins Public Health Magazine.* Spring 2017
-S. Sarkar, L. Wen. "Building a 21st Century Health Department". *Health Affairs.* October 2016.
-R. Onie, S. DiTroia, **S. Sarkar**. "Transformative Pathways to Improving Health Care. *Stanford Social Innovation Review.* 2014.
-**S. Sarkar**, A. Garg, and B. Solomon. "Impact of a Family Resource Desk at an Urban Medical Home for Low-Income Children". Pediatric Academic Societies & Asian Society for Pediatric Research Annual Meeting, May 5, 2008; PAS2008:5810.6.
-**S. Sarkar.** "Impact of a Family Help Desk at a Medical Home for Urban Children". Johns Hopkins School of Public Health and Baltimore City Health Department: Urban Health Institute Journal, May 9, 2008; 1: 67-68.
-A. Garg, **S. Sarkar**, B. Solmon, M. Marino, R. Onie. "Linking Urban Families to Community Resources In the Context of Pediatric Primary Care." Journal of Patient Education and Counseling. 4 December 2009. ISSN 0738-3991, DOI: 10.1016.
-**S. Sarkar.** Selected poetry published in *Yale Journal of Humanities in Medicine, 32Poems, Canadian Medical Association Journal, Vaani, Broken Circles Hunger Anthology, Cerebration, Pyrta, Same Difference: An Anthology, Urban Confustions, Frontage Roads, and Pothiz.*

Selected Talks

- **Inside/Outside: Stories of Baltimore.** TEDxJHU talk, 2016.
- **Interview re: patients' social needs** on Conversations on Health Care, Public Radio, 2014.
- **Keynote: What will it take to integrate population health into primary care?.** Patient-Centered Primary Care Collaborative Annual Conference, 2017.
- **Keynote: Going upstream.** National Health Outreach Conference, 2016.
- **Panelist,** Community Health Challenges and Solutions National Conference, 2016.
- **Panelist,** Impacts of Redlining on Health at 21st Century Cities Series, 2016.
- **Panelist,** Eighth National Alternative Payment Model and Accountable Care Organization Summit, 2017.
- **Panelist,** Aligning for Action – Healthcare Payment Learning and Action Network, 2017.
- **Panelist,** Association of Academic Health Centers' Patient Experience Summit, 2014.
- **Keynote: A vision for health.** Massachusetts Medical Society Public Health Leadership Forum, 2014.
- **Panelist**, Robert Wood Johnson Foundation TEDMED Great Challenges – Impact of Poverty on Health, 2013.
- **Panelist**, Centers for Disease Control Public Health Workforce Summit, 2012.